



MAESTRÍA EN FINANZAS

Trabajo final, Diciembre 2022

CFA Institute Research Challenge
Valuación Bioceres Crop Solutions Corp (BIOX)

Alumno: Francisco Perarnau
Tutor: José Dapena

Introducción

El CFA Institute Research Challenge es una competencia global anual de equity research. Las sociedades CFA locales trabajan en conjunto con las universidades para formar grupos de hasta 5 integrantes. Los equipos deben estudiar y analizar una compañía con oferta pública y preparar un reporte que fundamente la recomendación de comprar, vender o mantener la acción de la compañía.

Cada equipo podía recibir consejos y apoyo por parte de algún miembro de la facultad y algún miembro de la industria que fuera miembro de la CFA Society. En nuestro caso tuvimos como tutor a Jose Dapena y a Gonzalo Álvarez como mentor.

Para el Research Challenge organizado en 2022 la empresa a valorar para los equipos de Argentina y Uruguay fue Bioceres Crop Solutions Corp (BIOX).

La competencia tuvo un kick – off oficial el 11 de agosto de 2022 y conto con la presencia de empleados de la empresa para presentar la compañía y dar un paneo general de la misma, en la cual detallaron su realidad financiera en aquel momento y distintos proyectos futuros y proyecciones de resultados.

Una vez seleccionados los integrantes del equipo, el tutor y el mentor se encargaron de dar seguimientos parciales y soportes para el desarrollo del reporte

El equipo quedo conformado por:

- Gonzalo Joaquín Cáceres
- Agustín Vargas Oria
- Federico Wacs
- Francisco Perarnau
- Gonzalo Simón

Luego de tener 2 conference call con la empresa se realizó la entrega del reporte final. Nuestro equipo quedo seleccionado para pasar a la instancia final de la competencia local, junto a otras tres Universidades de Argentina, el 8 de Diciembre de 2022. En esta instancia final se hizo una defensa oral del reporte en la cual fundamentamos nuestro target Price y los distintos métodos de valuación que utilizamos para llegar al mismo.

Luego de esta presentación, quedamos seleccionados como el mejor reporte y ganamos la competencia a nivel local, quedando así seleccionados para seguir participando a nivel regional.



CFA Institute

CFA Institute Research Challenge hosted by CFA Society Argentina & Uruguay

The CFA Institute Research Challenge is a global competition that tests the equity research and valuation, investment report writing, and presentation skills of university students. The following report was prepared in compliance with the Official Rules of the CFA Institute Research Challenge, is submitted by a team of university students as part of this annual educational initiative and should not be considered a professional report.

DISCLOSURES

Ownership and material conflicts of interest

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company. The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Receipt of compensation

Compensation of the author(s) of this report is not based on investment banking revenue.

Position as an officer or a director

The author(s), or a member of their household, does not serve as an officer, director, or advisory board member of the subject company.

Market making

The author(s) does not act a market maker in the subject company's securities.

Disclaimer

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation of warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by and person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an officer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with CFA Argentina and Uruguay, CFA Institute, or the CFA Institute Research Challenge with regard to this company's stock.



BIOCERES CROP SOLUTIONS CORP.

Exchange: NASDAQ

Ticker: BIOX

Valuation Date: 18-11-2022

Recommendation: BUY

Industry: Agricultural chemicals

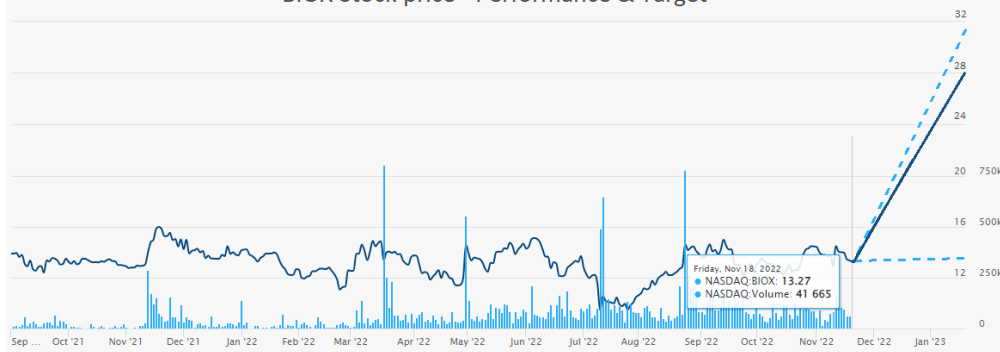
Current Price: US\$ 13,27 (18-11-2022)

Target Price: US\$28,01

Upside: 111,07%

Bioceres Crop Solutions Corp. is a fully integrated agricultural biotechnology company, provider of crop productivity solutions, together with crop nutrition and protection solutions, with a strong leadership position in South America and access to global agricultural markets through proprietary channels and industry-leading partners.

BIOX Stock price - Performance & Target



INVESTMENT SUMMARY

We issue a BUY recommendation on Bioceres Crop Solutions (NASDAQ: BIOX), with a target price of US\$ 28.01, representing a 111.07% upside from November 18th, 2022 closing price of US\$13.27. Our target price is weighted by an 80% on the discounted free cash flow valuation model, and 20% on the relative valuation model based on multiples. Our recommendation is based on the following cornerstones:

- Deal synergies of the recent merger with Marrone Bio Innovations:** Recent merger with Marrone Bio Innovations will not only allow the company to diversify its biologicals portfolio, but also to expand its geographical footprint to the United States. Before the merger, approximately 79% of the firm's revenues came from Argentina, whereas we are expecting that this percentage will reduce to 64% in 2032. This fact is expected to have a positive impact on the firm's valuation, given that it would reduce its exposure to Argentina's local political and macroeconomic risks.
- Increase in the world population and the demand for crop yields, particularly in a context of global warming:** The increasing demand for biological products can be attributed to the rise in sustainable organic farming practices and more biologically based integrated pest management strategies, as well as the need to address pest resistance. Awareness about the potential negative implications of conventional pesticides usage on the environment has received higher attention in the recent decade, which is fueling demand for adjuvants and biofertilizers. The rising concern over declining soil quality, due to overuse of chemical fertilizers and their potential ill-effects on human health, has encouraged the governments to promote this kind of products.
- Opportunities ahead in relation to HB4 drought-tolerant soy and wheat broad regulatory approvals:** HB4 takes part of the Seed & Integrated products segment of the firm, which has shown a 16% CAGR from FY18 to FY22, being the less growing product. Onwards, it is expected to grow at 28%, becoming the fastest-growing segment, with the additional benefit that it is the most profitable one.
- Total Addressable Market (onwards, "TAM"):** TAM is expected to increase between 6% and 16%, for a resulting total consolidated +US\$100bn global market opportunity. We are expecting the firm's revenue penetration over the total market to increase from 2.2% in 2022 to 5.0% in 2032, gaining 2.8pp of market share.

CURRENT HIGHLIGHTS

Argentina is going through a high inflation regime: Argentina inflation has risen to 87.7% YoY from October 2021 to October 2022, and even higher inflation is forecasted since Argentina has a strong primary deficit of around 1.1 trillion ARS for 2022 up to date. Argentina's debt was US\$ 378 bn. by the end of the second quarter of 2022, and access to international financing is limited and extremely hard, so this deficit has to be financed with monetary emission. The country is in a fiscal dominance regime, which implies that its monetary policy is dependent on the fiscal needs of the treasury. Apart from the emission problem, there is a large quasi-fiscal deficit, and the Central Bank's interest-bearing debt exceeds the monetary base, which is a huge risk, as it could trigger an expectations crisis that could lead to an inflation boost. A strong political and economic adjustment is needed in order to reduce inflation.

Syngenta agreement with BIOX announcement and execution: In October 2022, an upfront payment of US\$50 million was received by BIOX for the agreement with Syngenta previously announced, with a baseline of minimum profit required to be generated by Syngenta. This is good news for BIOX since this commercial agreement increases the company's liquidity and, in addition, expands the commercial horizon of Bioceres through Syngenta's channels of distribution. HB4 seeds are being planted in Latin America, and driven by a season of severe droughts, HB4 soy hectares has doubled last year's territory, for early season planting.

BIOX stock performance has exceeded market performance in 2022: The market opened in January 2022 with a BIOX stock price per share of US\$ 13.52. Throughout 2022, BIOX stock price has been volatile, reaching a minimum for the year of US\$ 9.76 per share on July 18th, 2022 just after the announcement of the ProFarm merger. This drawdown was sporadic, with BIOX share increasing its value to US\$ 14.36 by August 22nd, 2022. This huge increase of the stock price was due to a strong 4QFY22 financial performance with a YoY revenue growth of 59.86%. The closing price of BIOX was US\$ 13.27 as of November 18th, 2022, meaning a downside of 1.85% from the beginning of the year. S&P 500 performance YTD is -16.8%, so performance of BIOX has exceeded the performance of the S&P 500.

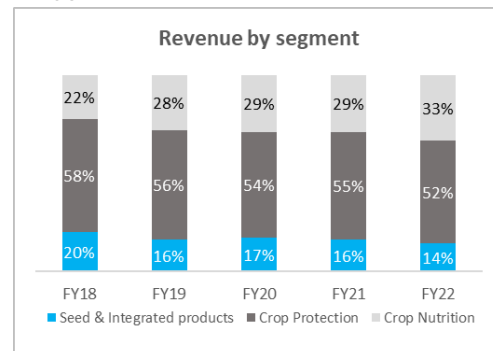
Exhibit 1

MARKET PROFILE	
Industry	Agricultural Chemicals
Sector	Materials
Date	18/11/2022
Current Price	US\$ 13.27
Target Price	US\$ 28.01
Upside	111.07%
Market Cap	833.35 MM
Outstanding Shares	62.80 MM
Free Float	23.08 MM
Avg Volume	US\$ 116.3 K
52 Weeks range (US\$)	9.27 - 16.00

METHODOLOGY	WEIGHT	PRICE
DCF	80%	US\$ 31.63
Relative Valuation	20%	US\$ 13.53
TARGET PRICE		US\$ 28.01

Source: Team estimates.

Exhibit 2



Source: Company filings.

BUSINESS DESCRIPTION

Bioceres Crop Solutions is a crop productivity provider specialized in delivering products with innovative technology to transition agriculture towards a carbon neutral activity. It is mainly a company that focuses on the development and provision of crop productivity solutions. The headquarters, where the main executives' offices are located, is in Rosario, Argentina. Bioceres parent company was founded in 2001 by a leading group of growers in Argentina to address the demand for higher crop yields and productivity in a sustainable and environmentally conscious ways. In 2019 Bioceres was listed on New York's stock exchange as Bioceres Crop Solutions. To develop their products cost-efficiently and with high quality, Bioceres has established many joint ventures in the past, including acquisitions and collaborative ventures, even with competing companies.

BUSINESS SEGMENTS

Bioceres Crop Solutions activities are divided in three main business segments. The **Crop Protection** is the segment that focuses on minimizing the crop loss through different products that can protect crop yields against pests, weeds, plant diseases, among others. The segment is divided between the adjuvants, the insecticides and the fungicides businesses. Adjuvants are additives used together with insecticides and fungicides to enhance the effectiveness of these last two products, to have a good protection against the different threats the crops may face. This Segment had a total revenue of 174.4 M for the Fiscal year 2022 (As reported on the Q4 financial statements published by the company) which represented 52.1% of the total revenue of the company with a gross margin of 29%.

The second segment is **Crop Nutrition**. The products in this segment provides the different crops all the nutrients needed, to complete their life cycle in a healthy way, optimizing quality and growth of the crop yield. Crop Nutrition products are divided between the inoculants and biofertilizers business, and micro-beaded fertilizers. Inoculants are bio-fertilizers products focused on the growth of leguminous crops such as soybeans and alfalfa. Micro-beaded fertilizers and biofertilizers have the same objective, that is enhancing the plants nutrients absorption. The first ones are more efficient than traditional fertilizers because they require up to three times lower applications. For the case of the biofertilizers, the production of them consists of the utilization of organic acids and biopolymers, combined with nutrients, to generate an eco-friendly solution for the fertilizers business. The total revenue of this segment for the same period was 109.1 M which represented 32.6% of the total revenue with a 43% gross margin. The last segment and the most profitable one is the **Seeds and Integrated Products** segment. The most important products for this segment are seed traits, germplasms and seed treatment packs. The seed traits products focus on improving plant yields by increasing their tolerance to droughts, soil salinity, among others. The main product of this sub-segment is the HB4 technology. Germplasms are living genetic resources such as seeds that are stored for animal consumption or plant breeding. Finally seed treatment packs are products that are sold combined to generate a high-quality treatment for seeds. The revenue for this segment on Fiscal year 2022 was 51.3M which only represented 15.3% of the total revenue, but the gross margin for this segment rose to 57%.

PATENTS AND LICENSES

As of June 2022, Bioceres owned or licensed 500 registered products and 257 patents and patents applications. These patents may have term of durations and geographical limitations. Competitors may use BIOX technologies in countries and jurisdictions where there is no intellectual property protection for them, and then import the resulting products to jurisdiction where BIOX has intellectual property protection. In that case BIOX may not have any legal action available and must compete with these products. One of the main licenses in development is the HB4 Technology. This technology consists of a program to develop a drought tolerant seed technology which also brings digital solutions to support client's decisions including a provision of end-to-end traceability for production outputs. Most of Bioceres licensed seed products under development includes HB4 technology. In September 2020 this technology was approved by the Argentinian ministry of agriculture, and the regulatory processes are advancing in different countries. HB4 has been approved for use in nearly 85% of the world's total soybean harvestable area. On FY22 key approvals were issued for wheat HB4 technology across the globe, from countries such as New Zealand, USA, Australia, among others. The main approval issued was by the Brazilian food regulatory institution because Brazil, purchases 85% of their wheat from Argentina. This last event was a key inflection point for the company's future performance, as it expects to increase the revenue in the future mainly with the commercialization of seeds with this technology.

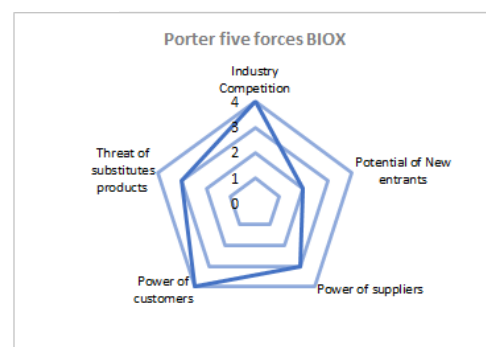
INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

International Context: Due to the war in Ukraine the global commodity market is going through a volatile period, with uncertain prices and commodities reaching all time high prices. BIOX as a crop productivity technology provider, is really affected under these circumstances. If the price of certain commodities such as grains, milk, among others decrease, the value of Bioceres products is highly likely to be impacted in a same way. Ergo, Bioceres products are highly sensitive and dependent of commodities prices. Global economy is going through a period of high inflation with USA reaching as high as 7.7% interannual inflation from October 2021 to October 2022 and a Core inflation, which consists of all items excluding food and energy, of 6.3% for the same period. Because of this, most of the countries around the world are hiking rates, making indebtedness rates go higher. As of June 2022, Bioceres indebtedness was USD 158M, of which USD 71.3M Matures in FY23. After consolidating financial statements with ProFarm due to the merger, total indebtedness rises to USD 235.4M, of which USD 81.8M matures in FY23. BIOX operations depends in a very large extent to Borrowings. If BIOX fail to issue debt in the future, operations, research and development may be seriously compromised. As of June 2022, most of its indebtedness is in US Dollars, adding up to USD 117.2M with a weighted average interest rate of 3.54%, and with rates expecting to grow.

Local Context: Since 79.7% of the revenue reported comes from operations within Argentina and the headquarters are also located in the same country, we will discuss the economic and regulatory context. Argentina's inflation rate YoY from October 2021 until October 2022 was 87.7%. This means that the country is going through a high inflation regime, with no expectation to decreasing inflation rates soon. There are some fixed income instruments in Argentina that are an opportunity to finance Bioceres Crop Solutions and its subsidiaries operations. Dollar linked bonds are bonds issued in Argentinian pesos linked to the official FX USD/ARS rate. In December 2021, Rizobacter, the biggest of BIOX's subsidiary companies, issued this type of bonds for a total amount of 20M USD. This last one is a "bullet bond", with the repayment of the principal amount at maturity, which is in December 2024. In addition, the bond has a fixed annual interest rate of 1.49% paid quarterly. Due to regulatory restrictions, access to the FX markets has been limited. The BCRA's communications "A 7106", "A 7230", "A7422" and "A 7466" has limited the amount to access the FX markets, to 2M USD monthly for debt repayment issued in United States dollars. For amounts higher than 2M USD, the access is only up to 40% of the principal and the rest must be refinanced. This generates a limitation for BIOX to get financing from the international markets.

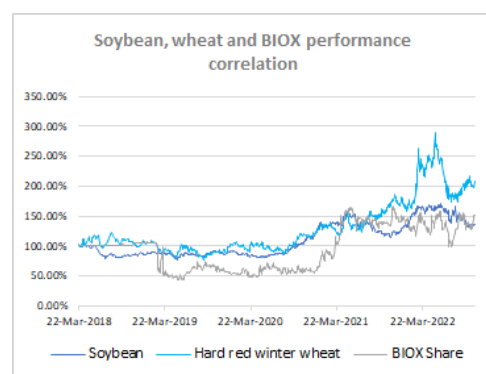
In addition, the FX gap between the official USD/ARS rate and the blue-chip swap rate, also known locally as "Contado con Liquidación (CCL)" FX rate, which is the implicit "free" exchange rate in the local financial market, is currently around 90%. On September 2019 Argentinean national executive power issued decree 609/2019 where Argentina's residents must repatriate exports proceeds into Argentina within 5 workdays from the collection date, and gave the central bank of Argentina the power to handle the FX market, liquidating these proceeds at the official exchange rate. Due to this, the 30.46% of revenue that is generated outside Argentina is affected by this decree generating susceptibility to the FX gap and a loss in profits.

Exhibit 3



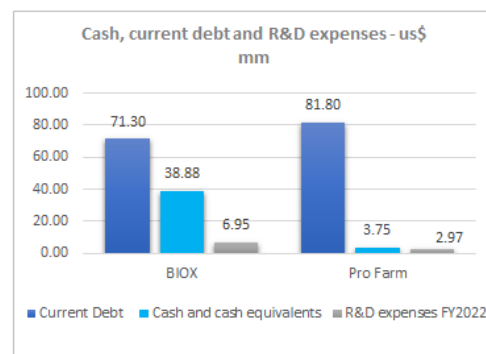
Source: Teamwork from 20F information.

Exhibit 4



Source: Refinitiv.

Exhibit 5



Source: Company filings.

Competitive Positioning: The agricultural biotechnology market is characterized for an intense commercial and technological change, as it is a fast-paced industry with constant discoveries and advancements in different products. Bioceres has different competitors across each business segment. Some of the main competitors are large scale companies such as Bayer, BASF, Corteva, among others. Rizobacter, one of the companies on Bioceres' portfolio, has a leading position in the Adjuvants market in Argentina, with a total of 29% of the total market share for the segment. Nonetheless, in order to develop their products cost-efficiently, Bioceres establishes joint ventures with these competing companies. On September 15th, 2022, Bioceres signed an agreement with Syngenta Seedcare. With this agreement, Syngenta will become the exclusive global distributor of Bioceres biological solutions for seed care application. The products covered by the agreement will be sold under the trademarks owned by Bioceres group. This will cover all global markets, except for Argentina, where both parties will maintain the existing framework. For this, Syngenta U\$D 50 million payment was received upfront by Bioceres on October 6th 2022 and BIOX will receive between 30% and 50% of the profit generated by sales conducted by Syngenta. ProFarm products are not included in the scope of this arrangement. The agreement sets a minimum target of U\$D 230M of profit to be received by BIOX, throughout the life of this agreement. Other main joint ventures worthy of being mentioned are the one with Trigall Genetics S.A., where BIOX has a 50% of equity interest, and Synertech Industrias S.A. The first was formed in Uruguay, where both parties engaged in the development and deregulation of conventional and genetically modified wheat varieties in Latin America. The second one was acquired as part of Rizobacter's acquisition in 2016, where Rizobacter, in partnership with De Sangosse, formed Synertech Industrias S.A. The objective of this was the production and commercialization of micro-beaded fertilizers, and to operate jointly the production plant in Pergamino, Argentina, with a capacity to produce 50,000 tons of the products mentioned before.

Market share per segment: The total addressable market for the crop protection segment by the end of fiscal year 2022 was expected to be 10.3B U\$D. For BIOX the total revenue for this segment was 174.4M U\$D representing a 1.69% of market share. For the crop nutrition segment, the total addressable market by June 2022 was 34.8B U\$D. The total revenue recognized by BIOX on this segment by FY23 was 109.1M U\$D, representing a 0.31% market share. Finally, the seeds and integrated products segment has the biggest addressable market, totaling 67B U\$D. For this segment, BIOX revenue was 51.3M U\$D, adding up to 0.07% of market share. Seeds and integrated products is the segment with the highest possibilities of market share growth for BIOX, with HB4 technology starting to be approved worldwide in the most important markets. We expect this segment to gain a bigger portion of BIOX revenues throughout the next years, once HB4 genetically modified seeds gain more acceptance among customers and society, because adverse weather conditions are becoming more frequent.

ProFarm Merger: ProFarm (previously named as Marrone Bio Innovations) is a company that produces a variety of sustainable products for crop protection, plant health and nutrition to increase crop yields, while also reducing the environmental damage produced by this type of products. The products that ProFarm develops will generate a synergy with BIOX biofertilizers segment, expanding and diversifying the portfolio. On July 12th 2022 the merger was closed. The agreement totalized in an exchange ratio of 0.088 BIOX share per each ProFarm outstanding share. This adds up to a total estimated price of U\$D 207 million. ProFarm will generate a synergy with Bioceres Crop Solutions companies, by expanding the commercial scope to United States. Most of ProFarm products are commercialized in United States. In addition, ProFarm has two main business partners. The first one is Syngenta, that distributes ProFarm bio fungicides across Europe, the Middle East and Africa. The second one is Corteva, which is a global partnership for the distribution of UBP products (a new type of fertilizers for crop protection and yield augmentation). The rest of the products will be distributed by Rizobacter in Latin America. This will generate a diverse customer base, since ProFarm has a strong position in the biological crop protection, plant health, and nutrition industries. As of June 2022, ProFarm revenue represented 13% of BIOX's total unconsolidated revenue, and with this merger, we expect the revenue to increase around 15%. BIOX will become a global leader in the sustainable agricultural solutions industry with this merger.

FINANCIAL ANALYSIS

Financial Highlights	FY18	FY19	FY20	FY21	FY22	FY23E	FY25E	FY27E	FY29E	FY31E	FY32E
Revenues	133,491	160,309	172,351	206,698	330,444	509,418	792,802	1,125,483	1,586,760	1,977,736	2,102,874
Seed & Integrated products	20%	16%	17%	16%	14%	11%	14%	16%	20%	23%	25%
Crop Protection	58%	56%	54%	55%	52%	52%	49%	46%	44%	42%	41%
Crop Nutrition	22%	28%	29%	29%	33%	36%	38%	37%	36%	35%	34%
Gross Margin	42.3%	45.8%	45.7%	42.6%	36.3%	42.3%	43.6%	43.3%	45.0%	46.0%	46.5%
Seed & Integrated products	50%	61%	61%	61%	54%	60%	60%	61%	62%	62%	62%
Crop Protection	36%	40%	43%	34%	28%	36%	36%	37%	38%	38%	38%
Crop Nutrition	51%	49%	42%	49%	43%	46%	48%	44%	45%	45%	46%
EBITDA Margin	15.0%	20.4%	25.5%	21.6%	14.9%	14.0%	14.7%	17.0%	18.3%	19.8%	20.2%
Total Debt / EBITDA	5.5x	3.3x	3.4x	3.9x	3.5x	2.5x	2.2x	2.1x	2.0x	2.0x	2.0x
Current Ratio	0.7x	0.8x	1.3x	1.3x	1.3x	1.3x	1.3x	1.4x	1.5x	1.7x	1.8x
Solvency Ratio	1.2x	1.3x	1.3x	1.3x	1.4x	1.4x	1.3x	1.2x	1.2x	1.3x	1.4x
CapEx / D&A	1.3x	0.7x	1.0x	2.2x	1.0x	1.3x	1.4x	1.4x	1.4x	1.4x	1.4x
Cash Conversion Cycle	105	80	47	123	125	107	92	84	84	84	84

Sources: Eikon Refinitiv and Team Estimates.

There are several growth drivers to consider when analyzing the current and future financial situation of the company. Among others, we took particular consideration in the following:

- Deal synergies of the recent merger with Marrone Bio Innovations.
- Opportunities ahead in relation to HB4 drought-tolerant soy and wheat broad regulatory approvals. HB4 takes part of the Seed & Integrated Products segment of the firm, which has shown a 16% CAGR from FY18 to FY22, being the less growing product. Onwards, it is expected to grow at 28%, becoming the fastest-growing segment.
- Total Addressable Market (onwards, "TAM").
- Increase in the world population and the demand for crop yields, particularly in a context of global warming.

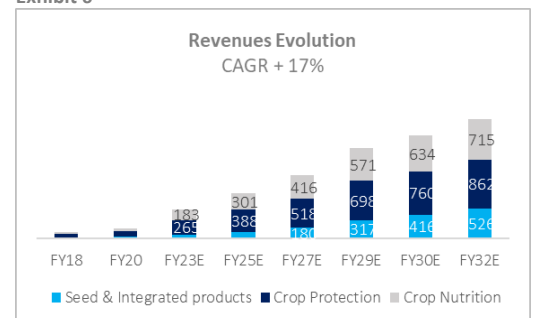
REVENUES

To analyze the historical performance of the company, it is necessary to start with the 1Q23 results presented on November 10th, 2022. As previously mentioned, on July 12th, 2022, Bioceres announced the closing of the merger with ProFarm (former Marrone Bio Innovations). Through the merger, the company looks to strengthen and expand its portfolio of biological products. This merger takes particular importance when analyzing the company's revenue for two main reasons: 1Q23 results included ProFarm's performance for the first time and grew by 71% compared to 1Q22.

Revenue growth was driven by the Crop Nutrition segment, which took the lead with a 103% growth from 1Q22 to 1Q23, led by the strong inoculant's performance and the successful pre-season summer in Latin America. One step further, Seeds & Integrated products segment grew by 59% due to higher seed treatment packs sales in Latin America. Finally, Crop Protection showed a 54% growth YoY driven by solid adjuvants sales in LatAm and high commodity prices, which allowed farmers to invest in biocontrol products.

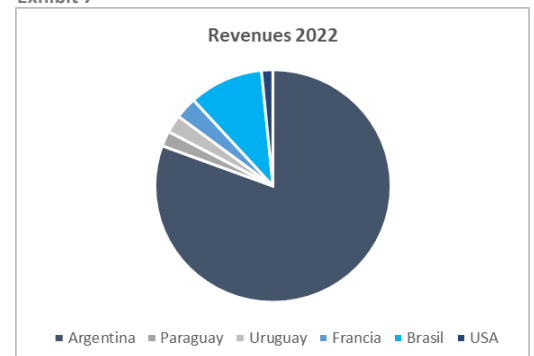
Taking focus away from last quarter results, we believe the firm's revenues grew at a 25% CAGR between 2018 and 2022 based on: (i) the strong awareness that arose in the last years about pesticides best practices, and

Exhibit 6



Sources: Eikon Refinitiv and Team Estimates.

Exhibit 7



Source: Eikon Refinitiv.

the positive impact of biopesticides on the environment; (ii) disruptions in global markets which led to higher commodity prices and benefitted adoption of new technologies, and; (iii) strong market position, being a global leader in the inoculant's market (23% market share), in the Argentine adjuvant market (29% market share), and preparing to grow strong with its state-of-the-art product, genetically modified seeds under the HB4 program.

Continuing with the analysis, it is worth mentioning that –according to Fortune Business Insights– Bioceres will address a +US\$169bn global market opportunity as the company's three operating segments keep up with the continued signs of growth around the world. Fortune Business Insights market research reports suggest that the TAM for genetically modified seeds (onwards, "GM seeds") was valued at US\$20.1bn in 2018 and is projected to reach US\$30.2bn by the end of 2026. As further developed in the next paragraph, the GM seeds line of business is one of the company's key revenue drivers as the HB4 technology program gains more prominence, considering the already obtained regulatory approvals. In fact, it is very relevant to point out that in FY2022 the company reported the first income from sales of genetic wheat seeds under the HB4 program, and why we believe this will drive the company's revenue in the future.

To this day, the company's HB4 technology remains the market's only solution for drought tolerant wheat and soybeans, with recent regulatory approvals for importation and animal and human consumption of drought tolerant HB4 wheat flour in Brazil (November 2021), and drought tolerant HB4 soy in China (April 2022). This definitely marks a big milestone in the company's trajectory, as Bioceres is about to commercialize HB4 wheat flour and HB4 soybeans globally, which could result in a huge increase in revenue as a result of the sale of these products.

In addition, existing regulatory approvals in almost 85% of the world soybean market, including Argentina, Brazil, Paraguay, the U.S., Canada and China, and regulatory filings currently under review in Bolivia, Uruguay, Malaysia, India, Indonesia and South Africa, show signs of international expansion outside Latin America. This could result in a greater diversification of the company's revenue in geographical terms and less exposure to the macroeconomic adversities faced by Latin American countries (particularly Argentina, which represented 79.2% of the company's total revenue in the last fiscal year).

Continuing with the TAM addressed by the company, it is worth mentioning that the rest of the markets addressed by the company will increase by CAGR's of 6%-16%, for a resulting total consolidated +US\$100bn global market opportunity.

To analyze how the firm will perform in relation to its TAM, we chose a penetration metric calculated as revenues of the segment over the TAM of the same segment. From 2018 to 2022 Bioceres increased its market penetration in the Seed & Integrated Products segment from 0.12% to 0.19%, followed by an increase in the Crop Protection segment market penetration from 1.18% to 1.69%, and an increase in the Crop Nutrition segment market penetration from 0.11% to 0.33%. The company's increased market penetration in all three operating segments is a growth driver to which particular attention should be paid when it comes to projections, as continued industry growth, expanding regulatory approvals for Ag-Tech products from different countries, and continuous investments in R&D could result in greater market penetration by the company. Even so, it should be noted that the segment with the highest penetration over the TAM is that of Seeds & Integrated Products, and at the same time it is the product segment that presents the most profitable margins (projected margin of 62% for 2032). Therefore, it can be seen that this driver has a positive impact on the profitability of the company.

The company reported revenues of US\$47.9mm from the Seed & Integrated products segment and US\$173.1mm from the Crop Protection segment, the company's most profitable segment historically. Last but not least, the company reported revenues of US\$109.5mm from the Crop Nutrition segment, composed of US\$24.5mm from the sale of Inoculants & Biofertilizers and US\$87.2mm from the sale of micro-beaded fertilizers.

By 2023, we project a 54% YoY increase in Bioceres revenue driven by synergies from the Marrone deal, allowing the company to expand its presence in the U.S., and more specifically in the Biocontrol market. In addition, we took into account the announced expansion of Bioceres adjuvant plant in Brazil, the Syngenta US\$50mm deal, which we expect will leverage the firm's position in the Crop Protection market and, finally, we expect a slight development in the HB4 segment, which has been suffering the effect of droughts in LatAm. As a result, we expect a 20% CAGR from 2023 to 2032. The Seed & Integrated products segment, which in FY2022 accounted for 14% of share of total revenues, will end up 2032 with a 26% share.

PROFITABILITY

Bioceres has shown strong operating metrics since 2018. The company's gross profit has been solid during 1Q23, with a 40% gross margin (-6 p.p. vs 1Q22 pro-forma figures including Marrone). Reduction in margin can be explained by product mix sold in the last quarter. Crop Protection, which grew 54% YoY, has the lowest margin of all segments (26%), while Seeds & Integrated products has the best margin of all segments (60%). However, it has a low impact on the overall gross margin due to its low share over total revenues. We forecast a 12.0% to 24.0% growth in this metric for the next ten years, given that we project a gain in the revenue share of the Seed & Integrated products segment, the most profitable so far.

Since 2018, the company's EBITDA margins have been varying between 15% and 25%. As of 1Q23, the firm reached a record US\$24.5mm in EBITDA, an outstanding performance taking into account Pro-Farm's negative EBITDA contribution and transitory costs related to integration efforts. Despite this, EBITDA margin for 1Q23 rounded 19% and stood higher than 2022 EBITDA margin of 14.9%.

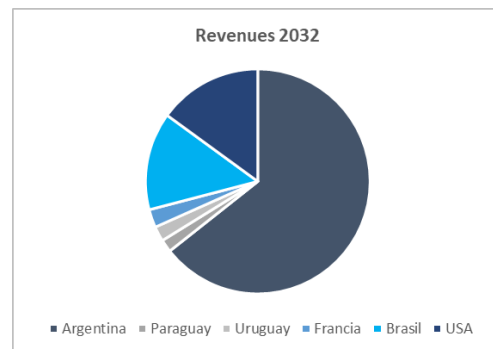
When taking a closer look at the company's cost structure, the most significant expense is given by SG&A, which –since 2018– accounted for an average 21.7% share over total revenues. In further detail, SG&A expenses are mainly composed by employee benefits, taxes and freight costs (7% for employee benefits, 3.3% for taxes and 2.9% for freight costs). Additionally, given that Bioceres is an agro-tech exporter and that the majority of its operations are run in Argentina, it is necessary to mention that it is highly affected by unfavorable FX and inflation movements due to cost allocations. Plus, Argentina's inflation has been growing at a higher rate than the FX in the last quarters, deteriorating the company's margins given that its revenues are denominated in USD dollars, while its costs are in local currency. This economic situation that affects the company's profitability is further developed in the valuation section of the report.

Another significant cost of Bioceres stands at R&D expenses. The upside benefits are huge when R&D objectives are met, which is the main reason why Bioceres continually engages in joint venture agreements and collaborations with companies, business research institutions and government agencies to leverage their resources. In the latest available period, R&D costs have represented 1.3% of the company's revenues and have shown a downward trend in recent years, which could reflect that the greater development efforts of HB4 have already been done. We project that this expense will remain at levels of 1.2% in the next ten years based on its historical expense.

WORKING CAPITAL

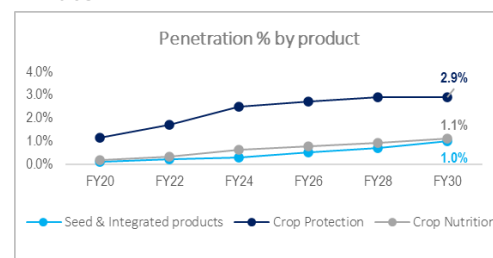
Bioceres has a positive conversion cycle of 125 days, in line with the firm's nature, which is characterized by strong seasonality in its sales. This is partially offset by the fact that the firm has a diversified portfolio, in a variety of countries. The company has an average collection period of 124 days, while its commercial payment average period is of 220 days. The key variable that is making cash conversion cycle positive is the inventory turnover, which stood at 221 days during the last period, which might reflect stock accumulation derived from HB4 production that the company is not yet selling at its full capacity. As a result, the company has shown negative net working capital, implying cash outflows in each of its historical periods. For the next 10 years, we are projecting an improvement in current assets rotation, driven by less accumulation of the HB4 product and resulting in less inventory days. Moreover, we are projecting both days receivable and payable to improve as the company continues gaining market share and, as a consequence, negotiating power.

Exhibit 8



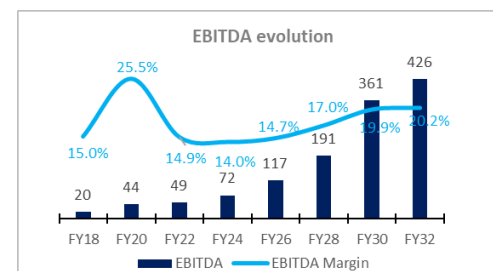
Source: Team Estimates.

Exhibit 9



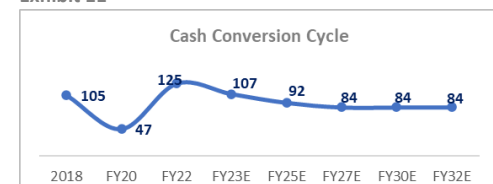
Sources: Fortune business insights and Team Estimates.

Exhibit 10



Sources: Eikon Refinitiv and Team Estimates.

Exhibit 11



Sources: Eikon Refinitiv and Team Estimates.

CAPEX

The most relevant recent plant expansion that Bioceres has carried out is in the adjuvant plant in Brazil. Investments in this plant and in the biotech plant in Argentina, which will be operational in the next fiscal year, will allow the firm to streamline its production processes, ensure quality, lower costs, and diversify its revenue source and asset base. We are expecting a US\$20mm (US\$16mm from Bioceres and US\$4 mm from Marrone) investment for the next fiscal year with expansion objectives, deriving in a CapEx/D&A ratio of 1.3x, slightly above its historical ratio.

DEBT & CAPITAL STRUCTURE

As of June 2022, the company had debt in the amount of US\$172.8mm. When excluding leases and convertible notes, this debt reaches US\$148.5mm, 56% of which was due in the short term (less than one year). Moreover, the company's debt is 81% denominated in USD dollars, while the rest is distributed 13% in ARS and 7% in RS\$.

As of June 2022, the firm had a total outstanding of US\$70.5mm in bonds. It can be appreciated that yields have been growing in the past year, in accordance to a context of high interest rates in order to control inflation. Additionally, they have been affected by Argentina's country risk, which went from 16.9% in December 2021 to 25.9% in October 2022. The weighted average yield of the firm's corporate bonds stood at 5.2% in October. We are projecting the firm to improve Debt/EBITDA ratio in the following years, based on strong cash generation that will allow it to finance more of its investments with its own cash.

VALUATION

We are issuing a BUY recommendation, with a US\$ 28.01 target price, a 111.07% upside from November 18th, 2022, price of US\$ 13,27. This price arises from a weighted average price that combines a DCF valuation composed of various potential scenarios, resulting from stress testing both endogenous and exogenous shocks, and a relative valuation of EV/EBITDA and EV/Revenues multiples.

The DCF valuation performed contains a total of 3 main dimensions that are segmented as Company dimensions ("Bioceres dimensions"), Synergies dimensions, and Macroeconomic dimensions. All of these are composed of a set of variables that will be described below, and are divided by 3 different possible scenarios (Base, Bearish and Bullish), arriving at a total of 27 plausible combinations that, in the end, will construct one unique price. These scenarios were built by shocking the different variables that have an impact on Bioceres's financial performance, as detailed below:

- I. **Bioceres dimensions:** Includes assumptions of its endogenous performance, such as the firm's ability to commercialize its HB4 products, disbursements in capital expenditure, working capital predictions, financing and debt repayment, and its ability to penetrate new markets and increase its market share.
- II. **Macroeconomic dimensions:** Global and local macroeconomic assumptions, for which we projected the country risk premiums on those countries where Bioceres has a presence. We also simulated the FX gap in Argentina and its regulatory and capital controls drawbacks, commodities' prices, and we projected the behavior of the FED's monetary policy, and the movements on the yield curve resulting from that.
- III. **Synergies dimensions:** Synergies derived from its recent merger with ProFarm, and how it may impact its revenues, margins, expenses, and the market share increases derived from this.

ESG INTEGRATION

To integrate the ESG factors into our valuation, we decided to give the company an ESG score based on the SPICE rating system which adjusts the Beta used in the valuation (further developed in the ESG section). Based on this rating system, it was assigned a "B-" rating to Bioceres, since the company has a relatively satisfactory ESG performance and a moderate degree of transparency when reporting ESG information publicly. Consequently, based on this rating we decided to grant Bioceres a 5% increase in the Beta used in our DCF valuation, which directly affects our cost of equity and, ultimately, our WACC estimation.

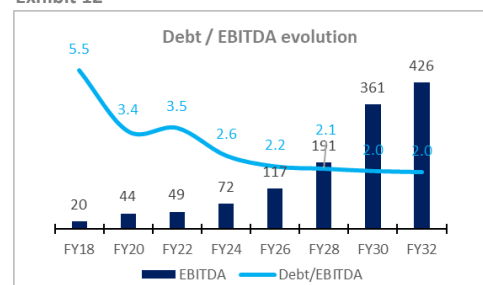
DCF VALUATION

We utilized a multi-year WACC approach in which we made different scenarios for the following variables:

- I. **Risk-free rate:** Risk-free rate projections consist of our estimations of the 10yr treasury bond yield for the next 10 years. In order to obtain a set of projections, we modeled the potential FED's interest rate policy based on inflation and GDP expectations, among others. In order to build risk-free rate estimates and taking into account that the DCF is sensitive to changes in that variable, we constructed 3 possible scenarios, which were later included in what we defined as Macro dimensions before. Detailed scenarios can be seen in the Appendix.
After the Fed Funds Rate policy is defined for each scenario, we then build our assumptions for the business cycle going forward, starting with the idea that we are currently in the late stage of the cycle, with a recession as the next step. The business cycle dynamics define the yield curve movements. So, with the business cycle determined, which in turn helps us establish how steep the yield curve would be, and with the Fed Funds Rate calculated, we arrive at our 10yr treasury yield estimations.
- II. **Country risk and FX gap:** Taking into account that, nowadays, 79% of the company's revenues are allocated in Argentina, it is key to estimate different country risk and FX gap scenarios for the country, given that the WACC and FCF calculations are very sensitive to these variables. For the base scenario, we assume that the 2023 elections will be won by a center-left or right candidate which will cause country risk to fall in the short-term. In the bearish scenario, 2023 elections are won by a radical left government, which will boost country risk to a hyperinflation scenario, to then stabilize in the middle-term. Finally, our bullish scenario is driven by the triumph of a liberal party in the 2023 elections, which will generate calm in the market and drive Country Risk down. FX gap follows a similar approach: when country risk rises, so does FX gap. For our base and bearish scenario, we also took into account the electoral cycle dynamics, which indicates that in electoral years, which result to be the odd ones, country risk tends to rise given the implementation of populist policies.
- III. **Cost of equity:** We utilize the CAPM model. In order to build the cost of equity, we had to estimate the: (i) Beta of the company; (ii) market risk premium, and; (iii) country risk premium:
 - (i) **Beta:** we took the levered beta of the company from Eikon, from which we built the unlevered beta, subtracting the company's calculated income tax from the first one. This Beta was penalized by an ESG integration factor of +5% based on the SPICE rating system;
 - (ii) **Market Risk Premium:** we took the average return of the S&P 500 in the last 94 years, and subtracted the risk-free rate from it.
 - (iii) **Country Risk Premium:** for each country in which the firm operates, we added a country risk factor in order to penalize the respective cost of equity. Cost of equity results from the weighted average sum of all the cost of equities (Ke) from all the countries where the company operates.
- IV. **Cost of debt:** Built based on: (i) the weighted average yields of the firm's corporate bonds; (ii) the projected income tax rate, and; (iii) estimated debt to equity ratio. The weighted average yield of the firm's corporate bonds stood at 5.2% in October. We project that number for 2022 and then let it vary with our 10y treasury estimates. Income tax rate is estimated based on the weighted average of the firm's corporate tax rates in the countries where it operates. For 2023, we estimate a 32,2% consolidated income tax rate. When it comes to Debt/Equity ratio, we set an average D/E ratio of 1.1x, based on historical figures.
- V. **Terminal Growth:** We estimate a 1.5% terminal growth for our terminal value estimates. We based this projection on the latest IMF's "World Economic Outlook", which forecasts a 2.7% global growth during 2023, with a 25% probability of falling below 2.0%. Based on this, we decided to take a conservative approach when estimating this value.

As mentioned above, the DCF valuation contains a total of 3 main dimensions that are segmented as Company dimensions ("Bioceres dimensions"), Synergies dimensions, and Macroeconomic dimensions -all of which are composed of a set of variables- and are divided by 3 different possible scenarios (Base, Bearish and Bullish), arriving at a total of 27 plausible combinations that, in the end, will construct one unique price. Below, we are going to describe 3 scenarios: our base scenario, and the most bullish and bearish ones. These last two were assigned a very low probability of occurrence, but we decided to explain them nonetheless to address most of the potential ups and downs that the company may experience.

Exhibit 12



Sources: Eikon Refinitiv and Team Estimates.

BASE SCENARIO: COMBINATION OF THE 3 DIMENSIONS' BASE SCENARIOS

Revenue: CAGR projected at 17%. In the macro dimension, this scenario has the underlying assumption that commodities market will keep replicating the historical market trend. In the last forty years, commodities have shown –from a statistical point of view– a non-stationary behavior with an upward deterministic trend and seasonality, and a stochastic trend as well. We assume that market cycle dynamics will continue, with an upward trend. Additionally, we assume a scenario where HB4 gains share over total revenues goes from 14% to 25% in 2032 and also a scenario where synergies with Marrone result in a 1.1x lift in total revenues for the next FY.

Profitability: This scenario assumes a growing trend in the firm's gross margin and EBITDA margin metrics. One of the most distinctive characteristics of Bioceres is that it always managed to have operating profitability, despite adverse macroeconomic scenarios that Argentina (main revenue generator) went through along the years. Also, this variable is sensitized by our estimates on the FX Depreciation - Inflation spread. An endogenous variable to be taken into account is HB4 gain of share over total revenue, which corresponds to the Seed & Integrated Products segment. As explained earlier in the document, this segment is the most profitable of the company, and that's why a gain of share brings bigger margins as a consequence. Finally, we considered potential synergies that will affect the company's revenues and cost structure after Marrone acquisition, estimating Marrone negative EBITDA contribution to be zero at the end of FY23.

CapEx: Given the positive cash generation estimations, we are projecting growth in the firm's capital expenditures, based on the fact that it is a growth firm, which is continuously expanding its activity around the world, for which it will need to invest both in PP&E and Intangibles. CapEx/D&A ratio will grow from 1.0x in FY22 to 1.4x in FY32.

Working capital: For the next 10 years, we are projecting an improvement in current assets rotation, driven by less accumulation of the HB4 product and resulting in less inventory days. Moreover, we are projecting both days receivable and payable to improve as the company continues gaining market share and, as a consequence, negotiating power.

BULLISH CASE: COMPOSED OF A COMBINATION OF BULLISH ASSUMPTIONS

Revenue: CAGR projected at 20.4%. In terms of market assumptions, this scenario assumes a more optimistic view in short-term market dynamics, which will drive agricultural markets to grow at a faster pace, implying a positive effect in the firm's revenues. In the endogenous level, we assume HB4 gains share over total revenues more aggressively, given to the fact of great product adoption in the market, in a scenario of market expansion and limited resources, arriving at 29% of total revenues in 2032. In addition, integration efforts with Marrone pay off, with synergies effects of 1.2x over the firm total revenues in the next FY.

Profitability: Unlike base scenario, profitability is benefited by better FX and Inflation dynamics, which strengthens the firm's margins. Margins also grow because we are estimating more share of Seeds & Integrated Products over the company's revenues, which is the most profitable of its segments.

CapEx: The firm has more solid cash generation given its improved operating margins, reason why it can invest more of its cash in CapEx. CapEx/D&A ratio will grow from 1.0x in FY22 to 1.6x in FY32.

BEARISH CASE: COMPOSED OF A COMBINATION OF BEARISH ASSUMPTIONS

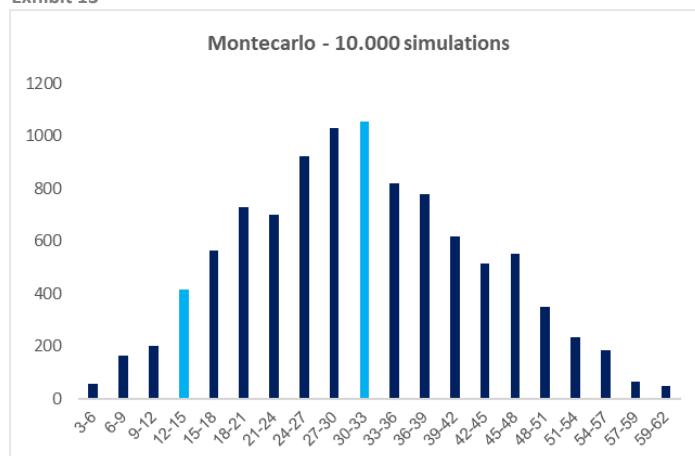
Revenue: CAGR projected at 14.3%. Market dynamics replicate the other scenarios, but with bigger negative bounces, which adversely affects the firm's revenue generation. Moreover, we assume regulations for HB4 could take more time to be fully approved in all countries, reason why the product gains less share over revenues than in the base scenario, representing 20% in 2032. Also, we assume no contribution in revenues from the Marrone acquisition in the short-term periods.

Profitability: Unlike base scenario, profitability is undermined by worse FX and Inflation dynamics, which weakens the firm's margins. These are also harmed because we are estimating less share of Seeds & Integrated products over the company's total revenues, substituted by less profitable segments, like Crop Protection and Nutrition.

CapEx: We assume more conservative CapEx levels. For the next 10 years, we forecast an average 1.0x CapEx/D&A ratio, meaning that the firm would only invest in maintenance Capex.

It is worth mentioning that, apart from commodity markets and FX depreciation-inflation spread, all scenarios are sensitized by the global macro variables named above, such as country risk and FX gap, which negatively affect in different magnitudes the firm's WACC y FCF.

Exhibit 13



Source: Team Estimates.

The final DCF price will arise from combining the different macro dimensions with Bioceres dimensions, to which we assign a weight of 70%, a combination of synergies dimensions with Bioceres dimensions, to which we assign a weight of 15%, and a combination of macro dimensions with synergies dimension with 15%. Weight distribution is justified in the fact that we consider that Marrone acquisition will not importantly conditionate the firm's capacity to deliver a solid financial performance. For this reason, we decided to give more weight to macroeconomic variables that significantly affect the target price. Finally, the different prices arising from these scenarios' combinations are weighted through a probability of occurrence, which leads to a final target price. For example, in the first of the three charts, we assigned a major probability to the combination of base cases, and a lower probability to the combination of bullish and bearish scenarios, which we believe are not highly possible given that the company tends to go in the same direction as the market. **The result of these calculations, which can be seen in the appendix, is a target price of 31,63 USD.**

Exhibit 14

Weight		BIOX Scenario			Weight		BIOX Scenario			Weight		Macro Scenario		
70%		Bearish	Base	Bullish	15%		Bearish	Base	Bullish	15%		Bearish	Base	Bullish
Macro Scenario	Bearish	9	20	28	Sinergies	Bearish	13	29	39	Sinergies	Bearish	18	29	41
	Base	14	32	44		Base	14	32	44		Base	20	32	46
	Bullish	21	46	62		Bullish	16	35	47		Bullish	22	35	49
Weight	Bearish	5.0%	8.0%	2.0%	Weight	Bearish	5.0%	8.0%	2.0%	Weight	Bearish	5.0%	8.0%	2.0%
	Base	10.0%	50.0%	10.0%		Base	10.0%	50.0%	10.0%		Base	10.0%	50.0%	10.0%
	Bullish	2.0%	8.0%	5.0%		Bullish	2.0%	8.0%	5.0%		Bullish	2.0%	8.0%	5.0%
Price	31.61				Price	31.02				Price	32.33			

DCF Target Price: 31,63 USD

Source: Team Estimates.

For the record, each combination of dimensions assumes that the remaining dimension is in the Base Case.

RELATIVE VALUATION

In order to obtain a proper share price for Bioceres, apart from the DCF valuation, we also valued the company using the multiple valuation methodology. To do this, we first had to select the company's comparable peers taking particular attention to the following criteria: (i) industry of the companies; (ii) main business segments; (iii) geography; (iv) stability of operations; (v) market share; and (vi) market capitalization. Nevertheless, when carrying out the peer analysis we found out how difficult it was to find

companies that could match the criteria listed above. Bioceres is a company focused on the development and provision of crop productivity solutions, like the peers we've selected, but there were no other peers that could match the innovative technologies delivered, the geographic exposition to emerging market countries, the high growth projections, the current market share, and the market capitalization size of Bioceres.

Having said that, we selected the following public and comparable companies for the valuation purposes: Adama, BASF, Bayer, Corteva, FMC Corp. and Nufarm. All these companies share the same industry and business segments as Bioceres, but are much bigger in terms of market capitalization (mainly BASF, Bayer, Corteva and FMC Corp.), and have a much more mature and stable operations, and don't share the same geographic exposition to emerging market countries like Bioceres. The mean and median multiples for EV/Revenue 2023E were 1,7x and 1,8x, respectively. On the other hand, the mean and median multiples for EV/EBITDA 2023E were 9.4x and 6.7x, respectively. From the mean and median of these multiples, we obtained a resulting share price of US\$11.93 and US\$12.68 using the EV/Revenue multiples, and US\$8.85 and US\$5.78 using the EV/EBITDA multiples, respectively.

However, we considered appropriate to apply 26% and 58% premiums to the share prices obtained for EV/Revenue and EV/EBITDA multiples, respectively, since the company projects a much higher Revenue and EBITDA 3-year CAGR compared to the average 3-year CAGR of the selected peers (2.6% vs. 28.6% for Revenue and 4.7% vs. 62.7% for EBITDA). Considering the premium obtained from the spread between the 3-year Revenue and EBITDA CAGR for Bioceres compared to its peers, we obtained the resulting share prices of US\$15.06 and US\$16.00 for the mean and median EV/Revenue 2023E multiples, and US\$13.94 and US\$9.10 for the mean and median EV/EBITDA 2023E multiples, with a resulting average share price for Bioceres of US\$13.53 through the multiple valuation methodology (simple average was used to calculate the resulting share price).

It is also worth mentioning that the resulting multiples used to obtain the different share prices of the company, compared to the company's multiples (2.0x for EV/Revenue 2023E and 14.0x for EV/EBITDA 2023E), suggest that Bioceres is trading over its peers even though the difference is not too big. This can be explained by the fact that the company's Revenue and EBITDA projections for 2023 are still small compared to the comparable peers selected, principally because of the growth projections forecasted for Bioceres in relation to the stable operations of peers.

Also, Bioceres is projecting two-digit growth numbers (i.e., 17% revenue CAGR for the next 10 years) for the upcoming years, considering the big chances that the company may become a leading regional player in the provision of GM seeds under the HB4 program. Recent regulatory approvals in agricultural dependent countries such as Brazil and China, suggest that there is a wide market to tackle in the GM seeds segment and Bioceres looks forward to pursue a leading position in these markets. In this regard, it was difficult to find comparable peers with comparable drivers, while matching the criteria mentioned above.

Last, it should be taken into account that the Revenue and EBITDA projections used for Bioceres's trading multiples were obtained using the base case scenario projections of the company: US\$509.4mm in Revenues and US\$71.6mm in EBITDA. Having said that, the resulting trading multiples obtained from the bearish and bullish case scenarios would rather alter the resulting valuation of the company.

INVESTMENT RISKS

OPERATING RISKS

OR1: The product development cycle is long, expensive and uncertain, and seeds or biological treatments may not have the desired effect on the crop or consumers. The business strategy involves entering into collaborative agreements and joint ventures with global agricultural companies to facilitate their low-cost approach to R&D. These collaboration agreements can cause problems since the partnerships can be terminated or the partners can have commercial interests inconsistent with those of the company.

OR2: Bioceres may not be able to obtain approvals, patents or copyrights or any other intellectual property rights over the technologies in the necessary jurisdictions. Even the rights can be later challenged by competitors or other parties; and competitors can design products that do not infringe these intellectual property rights.

OR3: Competitors may use Bioceres technologies in jurisdictions where intellectual property protection has not been obtained to develop their own products, and they may not be able to prevent such competitors from importing those infringing products into territories where the company does have intellectual property protection, since the enforcement is not so strict due to exhaustion of rights.

INDUSTRY RISKS

IR1: The company results of operations may be affected by the availability and price of raw materials, primarily the materials needed to engineer its technologies, such as crude glycerin.

The crop productivity market is also vulnerable to crop diseases and pests, the severity and effect of which can vary depending on the stage of production at the time of infection or infestation, the type of treatment applied, weather conditions and the risks associated with global climate change.

The weather is directly impacting the growth of the pastures and consequently, the subsequent preparation of silos, which will result in an increase in feed costs. Early corn can represent only 20% of the total production. This means that corn will be scarce both in Argentina and in the world, since Argentina usually breaks into the world market with an availability of 25 million tons for the March-April binomial, and by 2023 it is only expected to have 9 million exportable on those dates. However, if we look at the correlation from 2020 to date between the price of soybeans and wheat versus Bioceres's share price, the impact of this variation in prices of raw materials seems little since the correlation is low but positive, especially for the case of soybeans as we can see in the correlation matrix.

ECONOMIC AND POLITICAL RISKS

EPR1: Economic conditions may affect results of operations. Inflationary pressures in the US and in the rest of the world, China's trade wars, and the war in Ukraine can affect business in a number of ways. Reduced demand may lead the company and its competitors to offer products at promotional prices, which would have a negative impact on profitability. In addition, credit crunch in financial markets may adversely affect the ability of your customers and suppliers to obtain financing for significant purchases and operations and could result in decreased or canceled orders for their products.

EPR2: Economic uncertainty in Latin America and devaluation risk of the Argentine peso. As of June 30th, 2022, approximately 92% of the Company's consolidated sales of goods and services were attributable to operations in Latin America. Therefore, operating and financial results are directly affected by the region's macroeconomic and fiscal policies, including fluctuations in currency exchange rates, inflation, and interest rates in those markets.

The Brazilian market experienced greater volatility since Lula da Silva's victory in the presidential elections, accompanied by growing signs of deterioration of the current fiscal framework and a significant expansion of spending.

In Argentina, the fluctuation of the currency exchange rate, the FX gap, and high inflation, together with the inflationary control measures adopted by the Argentine government, caused a deepening of the recession (GDP decreased by 2.6% in 2018, 2% in 2019, 9.9% in 2020, increased 10,10% in 2021, and the IMF maintained the economic projections for Argentina, estimating that it will grow 4% in 2022). In addition, the Argentine government financed all economic assistance related to COVID-19 with a strong issuance of pesos via transfers of profits and temporary advances from the BCRA to the National Treasury, which also contributed to the increase in inflation (88% YoY), the demand for US dollars and the devaluation of the Argentine peso.

REGULATORY RISKS

RR1: Certain actions of Rizobacter are subject to a court order. Of their total interest in Rizobacter, 29% of the shares they own are subject to an injunction affecting 44% of Rizobacter's total share capital. The injunction

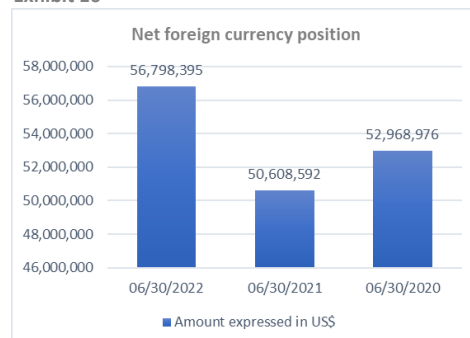
Exhibit 15

EV / Revenues	Mean	Median
EV/Revenue 23E	1,7x	1,8x
Revenue 23E	509	509
EV	868	915
(-) Total Debt	228	228
(-) Minority Interest	31	31
(+) Equity investments	39	39
(+) Cash and cash equivalents	101	101
Market cap.	749	796
# of shares (mm)	62,8	62,8
Share price	11,93	12,68
Premium	26%	26%
Final share price	15,06	16,00

EV / EBITDA	Mean	Median
EV/EBITDA	9,4x	6,7x
EBITDA 23E	72	72
EV	675	482
(-) Total Debt	228	228
(-) Minority Interest	31	31
(+) Equity investments	39	39
(+) Cash and cash equivalents	101	101
Market cap.	556	363
# of shares (mm)	62,8	62,8
Share price	8,85	5,78
Premium	58%	58%
Final share price	13,94	9,10

Sources: Factset and Team Estimates.

Exhibit 16



Source: Company filings.

relates to a litigation between the historical shareholders of Rizobacter, arising out of a disputed share transfer that occurred in 1995. Although the Argentine Supreme Court ruled against some of the disputing historical shareholders, those shareholders subsequently filed other legal remedies, including injunction, to further dispute the original transfer of shares. Given the Argentine Supreme Court's conclusion that the 1995 share transfer was valid, it is possible or likely that Group PLC will be required to pay a contingent purchase price of US\$17.3 million.

RR2: Possible tax and regulatory increases. The adjustment procedures for inflation and tax indexation in Argentine subsidiaries could negatively affect the financial statements and operating results. At the same time, given the high fiscal and quasi-fiscal deficit that Argentina has, in parallel with zero access to the international debt markets, and with a country risk that oscillates around 2,300 basis points, we cannot rule out the possibility of an increase in tax pressure in order to finance the current deficit of the country.

To date, the following crop exports are subject to the following export duties: soybeans and soybean products 33%, corn, wheat, barley, sunflower and sorghum 12%, corn flour 5%, wheat flour 7% and oil sunflower 7%. The company cannot guarantee or predict that there will be no further increases in export duties or that other new export duties, taxes, quotas or restrictions will not be imposed.

RR3: Changes in US and Argentine patent laws could decrease the value of patents. The National Institute of Intellectual Property of Argentina issued Regulation 283/15, seriously restricting the patentability of various categories of inventions in the agricultural field. This restriction is already being followed in practice by the Argentine Patent Office.

The US Supreme Court has ruled in several patent cases in recent years, either restricting the scope of patent protection or weakening the rights of patent owners. In addition to increasing uncertainty regarding the ability to obtain patents in the future, this combination of events has created uncertainty regarding the value of patents, once obtained.

FINANCIAL RISKS

FR1: FX gap and implications. Most of the operations are concentrated in Latin America and, consequently, a significant portion of the costs are incurred in local currencies, while revenues are primarily denominated in or influenced by US dollars. The currencies of Argentina and Brazil have fluctuated significantly against the US dollar in the past. The Argentine subsidiaries are temporarily subject to certain restrictions on external debt payments through the FX market. Therefore, they may be prevented from making payments by virtue of external indebtedness, or the costs of executing such payments could be substantially higher. Consequently, fluctuations in exchange rates in relation to the US dollar could affect the comparability of results from period to period and have a material adverse effect on results of operations and financial conditions.

Since September 2nd, 2019, the Argentine government has reinstated the mandatory repatriation and the conversion to pesos through the exchange market, of accounts receivables from exports of goods and services. In turn, it has imposed strict capital controls and transfer restrictions, which substantially limit the ability to obtain foreign currency, or make certain payments or distributions outside of Argentina. In addition, the company may be adversely affected by receiving payments and transfers from its Argentine subsidiaries, or such payments and transfers could be subject to substantial additional costs that, in any event, could negatively affect the business and the results of their operations.

The company's policy is, whenever possible, to allow Group entities to settle US dollar-denominated liabilities with cash generated from their own US dollar operations. They have liabilities denominated in US dollars in entities that use the Argentine peso as their functional currency, which expose them to exchange risks. Such risks are partially mitigated by its revenues, which are denominated in US dollars (mainly exports), or also in Argentine pesos but adjusted to reflect changes in US dollars. However, they do not use financial derivatives to hedge their exposure to the exchange rate.

The company estimates that a 20% devaluation or appreciation of the Argentine peso against the US dollar during the year ended June 30th, 2022 would have resulted in a net gain or loss before taxes of approximately \$11.4 million (amount in Argentine pesos expressed in US\$).

FR2: The indebtedness could adversely affect the financial conditions. As of June 30th, 2022, the company's total debt was US\$158 million, of which 45% (US\$71.3 million) matures in the fiscal year ending June 30th, 2023. After giving pro forma effect to the ProFarm merger, as of June 30th, 2022, total debt was US\$235.4 million, of which US\$81.8 million matures in the fiscal year ending June 30th 2023.

The company seeks to continue investing in R&D and will therefore need additional capital to finance those projects, and provide working capital to finance other aspects of the business. In line with this, they may seek to issue additional equity securities, which could result in the dilution of existing shareholders, or increase the level of debt, which could subject them to restrictive covenants that limit operating flexibility.

FR3: The share buyback program may reduce liquidity. On May 6th, 2020, the company's Board of Directors approved a program to repurchase its own securities. They may repurchase up to US\$5,000,000 to enhance the allocation of principal to certain capital financing obligations (the "Repurchase Program"). As of June 30th, 2022, they have acquired 464,455 common shares under the Buy-Back Program. Future purchases, if any, would be financed from cash balances and could reduce financial liquidity and indirectly increase indebtedness, as well as reduce the liquidity of common shares.

ENVIRONMENTAL RISKS

ER1: The successful commercialization of their products depends, in part, on the public acceptance of genetically modified agricultural products. GM crops are grown primarily in the United States, Brazil, and Argentina, where there are fewer restrictions on their production of GM crops. If they enact laws or regulations that prohibit the production of such crops, or make regulations more stringent, they may experience a longer product development cycle for their products, and may be forced to abandon related projects. Also, any future labeling requirements could add to these concerns.

Exhibit 17

		Likelihood of Negative Scenario		
		Low	Medium	High
Impact	High			FR1
	Medium	ER1	OR3	RR3
		RR1	OR2	OR1
	Low		IR1	FR2
			FR3	

Source: Team Estimates.

Exhibit 18

Risk	Mitigation Factor
Operating Risks	
Long, expensive and uncertain development cycle.	Entering into collaborative agreements and joint ventures with global agricultural companies to facilitate their low-cost approach to R&D.
Lack of approvals and patents.	Most of the company's products already have approvals in different countries for cultivation and commercialization. At the same time, presentations for approval began in other markets.
Industry Risks	
Price increases and shortages of raw materials.	Detailed monitoring of costs, forecasts in different scenarios and risk analysis, and use of financial derivatives.
Economic and Political Risks	
Economic uncertainty and Argentine devaluation risk.	Business diversification in all countries where the group is present. Avoid currency mismatches and encourage the use of hedges with derivative instruments.
Regulatory Risks	
Rizobacter shares subject to court order.	The court case is long overdue and the likelihood of ruling against the company is low.
Financial Risks	
FX gap.	Settle liabilities in dollars with the cash generated from its own operations in dollars to limit exposure to devaluation risk and the FX gap. Another alternative would be to start using financial derivatives.
Indebtedness.	The level of leverage and the debt rate of the company is low.
Environmental Risks	
Government acceptance of transgenic products.	HB4 technology helps meet growing demands for more sustainable farming practices, but also preserves and often helps restore or enhance the natural environment by promoting soil and soil microbiome health, mitigating the negative impacts of climate change.

Source: Team Estimates.

ENVIRONMENTAL

RESOURCE USE: The HB4 technology is the first in the world that confers climate resistance to soybeans and wheat by allowing these crops to tolerate drought conditions and soil salinity. The range of biotech crops and products not only help farmers and food companies meet the growing demands for more sustainable farming practices, but also preserve and often help restore or enhance the natural environment for future generations by promoting soil and soil microbiome health, mitigating the negative impacts of climate change by improving on-farm production, providing capacity to be self-sufficient on available arable land, safeguarding biodiversity, ensuring farmworker’s safety, and optimizing the use of increasingly deteriorated and diminishing natural resources. Furthermore, biotech crops were planted in only 29 countries as of 2019, representing a significant long-term growth opportunity in the sector.

Although the complementary technologies surrounding the integrated HB4 program, have the potential to target several Sustainable Development Goals (SDGs), the HB4 technology alone fully addresses the Zero Hunger goal as it targets marginal drought-prone areas, increasing yields and strengthening regional economies.

EMISSIONS: Bioceres is implementing its HB4 technology, that significantly increases yields in dry conditions and impacts positively the environment through water management and GHG emissions. HB4 technology enhances GHG sequestration in agriculture, by promoting crop health and yields, with environmentally beneficial crop protection tools such as Rizonema, Rizoderma and MBI-306.

Increased crop yields result in a carbon sink that helps remove carbon from the atmosphere by containing it in a solid medium, thereby reducing CO2 concentration and associated climate change impacts.

HB4 technology also facilitates double cropping, which seasonally rotates soybeans and wheat, an environmentally friendly farming system that is otherwise constrained by water availability. When combined with soil regenerative practices such as no-till farming, a shared cropping system made possible by HB4 seeds captures more carbon than conventional farming practices.

As part of their technology sourcing and product development activities, they develop GMOs (Genetically Modified Organisms) by inserting new genes into the genomes of certain plants and bacteria. In some cases, genes can make the organism poisonous or toxic, or they can cause the organism to develop other dangerous characteristics that could harm the environment around it.

INNOVATION: Bioceres strives to lead the GM4GOOD movement and proposes genetic engineering to improve the resilience of food systems by adapting to climate change while transitioning to carbon neutrality. Genetic transformation to gene editing can help avoid the use of chemicals, make crops more climate resilient, and improve several quality attributes important to human health and well-being. Regenerative agriculture and new carbon programs are expected to drive changes in agricultural production and Bioceres is among the pioneers and leaders in this regard.

The HB4 Program employs robust, closed farming systems that are combined with a high level of traceability through state-of-the-art digital farming technologies and strong management to ensure environmentally friendly farming practices. Growers planting HB4 seeds have access to a satellite crop imaging app, a weather monitoring app, and a crop scouting app.

Bioceres is integrating crop monitoring and inventory surveillance tools, including a sensor network, into its proprietary blockchain-native platform and is also looking at a set of potential complementary services and products such as silobag lances, environmental sensors, weather stations, cross-selling of satellite internet, among others. This should allow: (1) producers to track productivity and environmental KPIs for real-time decision-making and give consumers full visibility into low-carbon farming practices and grain processing, and; (2) Bioceres to push big data collection and analysis to a higher-level portfolio of fortified, sustainable and nutritional foods through the delivery of developments of productivity and quality characteristics and personalized biological solutions for producers.

SOCIAL

WORKFORCE: To date, they have 565 full-time employees, which implies a 13% increase in their workforce compared to 2021. On the other hand, their sales team is diversified in Argentina (53%), Brazil (30%), rest of Latin America (10%) and North America, Europe and Asia (7%) In addition, as a result of the ProFarm merger, they have added an additional 169 full-time employees.

- **Diversity and Inclusion:** Bioceres in its code of ethics mentions equal opportunities as one of its principles, seeking to provide equal opportunity to all its employees and to all qualified applicants for employment, without regard to race, caste, religion, color, ancestry, marital status, sex, age, national origin, disability, sexual orientation, or veteran status.
- **Career Development and Training:** They develop insertion and training programs to employ and educate young university students. The objective is for young professionals to find a training opportunity by accessing innovative forms of management and committed to sustainable production.
- The company is committed to creating, maintaining and protecting the necessary conditions that allow the development and improvement of the abilities, skills and knowledge of all officials and employees, thus ensuring the efficient achievement of the assigned goals. They follow a policy aimed at rewarding merit.
- **Working Conditions:** The company is certified by Great Place to Work, assuming the commitment to provide a safe environment for its employees and contractors. According to this rating agency, 74% of the company’s employees believe that it is an excellent place to work.
- **Health and Safety:** During the pandemic, they have prepared measures and developed security protocols to mitigate the eventual risk of being affected by the disease and prevent the uncontrolled spread of COVID-19 through the operations of their subsidiaries. In turn, they offer the possibility of being part of the Rizobacter Brigade, made up of a group of collaborators who receive professional training to assist in First Aid and security measures in the event of incidents.

PRODUCT RESPONSIBILITY:

- **Product Quality:** They offer high quality products, as they are innovating and looking for ways to continuously improve it. The traceability of products from the farm to the table makes it possible to deliver higher quality products (HB4 Program).
- **Responsible Marketing:** The company carries out responsible marketing campaigns through its social networks, reporting not only the prosperity of its products and technological developments but also educating the consumer, the producer and all the parties involved in the value chain, on issues related to the environment, to sustainability, transgenic crops and biotechnology.
- **Data Privacy:** Bioceres employees and officials sign a confidentiality and rights ownership agreement, through which they undertake not to reveal confidential information of Bioceres or customers, unless said disclosure is legally required.

COMMUNITY: Bioceres encourages all its employees and/or officials to actively participate in their communities and get involved in initiatives that contribute to improving the quality of life. Activities that contribute to the achievement of these objectives are not detailed, nor are they reported or detailed in their reports and social networks.

HUMAN RIGHTS: The company does not have a clear policy regarding its position and conduct regarding its commitment to human rights. We understand that some of the company’s commitments at the product development level address human rights, such as the company’s actions mitigating the impact of climate change through its technologies and addressing the goal of zero hunger through the HB4 program. However, the company does not issue clear communications in this regard, nor does it set objectives for different periods.

CORPORATE GOVERNANCE

MANAGEMENT STRUCTURE:

- **Independence:** As an exempted company incorporated in the Cayman Islands and listed on Nasdaq, they currently intend to follow the practice of their home country with respect to the composition of their board of directors and nominating committee and executive sessions. Corporate governance practice and requirements in the Cayman Islands do not require that a majority of its board of directors be independent; they do not require them to establish a nominating committee; and they do not

Exhibit 19

PILLAR	CATEGORY
Environmental	Resource Use Emissions Innovation
Social	Workforce Human Rights Community Product Responsibility
Governance	Management Shareholders CSR Strategy

Source: Eikon ESG pillars.

require them to hold periodic executive sessions at which only independent directors will be present. Such practices in the home country of the Cayman Islands may afford less protection to holders of common shares.

- **Diversity:** Bioceres’s board of directors is made up of seven members. Of this total, there are only two women who hold the positions of Executive and Non-Executive Director respectively. Therefore, the gender diversity of its board is only 28%, which implies that only a third of the board of directors is made up of women and only one holds the position of Executive Director. The final decision-making and management of the company is mainly in charge of men.
- **Committees:** The audit committee is not independent, and its members will also be appointed by the company’s board of directors and may be replaced by it. The Board of Directors may also decide who will be the president of the audit committee. This lack of independence and the influence of the board of directors is a negative point.

COMPENSATION: The compensation committee is not independent. It has sole authority to retain and terminate any compensation consultant, assist in the evaluation of employee compensation, and approve consultant fees and other consultant retention terms and conditions. Among the compensations are the Annual Bonus, granted to employees and not contemplated in the Equity Compensation Plans, to link a part of their compensation to achievable financial and operational objectives within the applicable fiscal year in accordance with a goal.

The Nominating and Governance Committee is in charge of evaluating the independence of directors and nominating people to serve as directors; review the committee structure and recommend directors to serve as members; review and recommend committee lists annually and recommend additional committee members to fill vacancies as needed; develop and recommend to their Board of Directors a set of corporate governance guidelines applicable to Bioceres Crop Solutions, at least annually, review such guidelines and recommend changes to their Board of Directors for approval as necessary; and oversee the annual self-assessment of their Board of Directors.

CSR STRATEGY:

- **ESG Reporting and Transparency:** The company lacks a separate sustainability report from its annual and quarterly reports. We consider this lack of specific ESG reports a negative point according to "Environmental, social and governance aspects of investment, a guide for investment" from the CFA Institute.
- **Code of Ethics:** Codifies the ethical and business principles that govern all aspects of Bioceres Crop Solutions's business. A copy of the Code of Ethics will be filed with the SEC.
- **Financing:** Since 2021 the company is contemplating the possibility of issuing a sustainable bond, with a coupon linked to the level of carbon dioxide emissions that they neutralize. It would be a bet to validate the company's sustainability framework. For that, they work with the Norwegian market, that has a certain history in ESG and sustainability linked bonds. Management believes that funding the company's growth through green bonds would be the optimal path.

SHAREHOLDERS:

- **Shareholders’ Rights:** All common shares have the same voting rights and no controlling shareholder of the Company has different voting rights.
- **Relationship with Group PLC:** Group PLC owns approximately 38% of the voting power of Bioceres Crop Solutions, pursuant to its shareholding and the Rizobacter Shareholders Agreement between Bioceres LLC, Pedro Enrique Mac Mullen, Maria Marta Mac Mullen and International Property Services Corp., who have agreed to vote in accordance with Bioceres LLC.
- **Policy on Transactions with Related Parties:** The Board of Directors has adopted a written policy “Related Person Transaction Approval Policy”, for the review of any transaction, arrangement or relationship, if the amount involved exceeds US\$ 120,000 and executive officers, directors, designated directors, or beneficial owners of more than 5% of the total capital of Bioceres Crop Solutions (or their immediate family members) are involved. These transactions are subject to control and approval by Bioceres’s board of directors through the corresponding committee.
- **Arrangements for Change of Control:** To date, there is no arrangement that could, when in effect, result in a change of control.
- **Shareholder’s Dilution:** Conversion of the issued notes would increase the number of common shares and result in shareholder’s dilution. On August 5th, 2022, they issued an aggregate principal amount of US\$ 55 million in secured convertible notes due 2026. The issuance of a substantial number of additional common shares upon conversion of the Secured Convertible Secured Notes due 2026 would result in the dilution of the existing common shares for holders at that time, and increase the number of common shares on the public market. Sales of substantial quantities of such common shares in the public market could adversely affect the market price of the common shares.

ESG CONTROVERSIES

The ban on the production of certain GM crops in certain countries and the current resistance of consumer groups to GM crops not only limits their access to such markets, but also has the potential to spread and influence the acceptance of developed products through biotechnology in other regions, and can also influence regulators in other countries to limit or prohibit the production of GM crops, which could limit commercial opportunities to exploit biotechnology. For example, in the United States, no product can be labeled "organic" if it contains any GMOs. In addition, some states in the United States are considering, and one state has passed, a law related to the mandatory labeling of GM foods, which may have a negative connotation for consumers and could make it difficult and more expensive for companies to use GM ingredients. In Argentina, a class action lawsuit has been launched against the national government and certain biotech companies (including Bioceres S.A., a subsidiary of Group PLC, which owns the intellectual property rights to HB4) that have regulatory approvals for GMOs, seeking, among other things, changes and mandatory labeling of transgenic foods, and environmental protection of land use.

To date, the request for a precautionary measure against the approval of GMOs presented by the plaintiffs was rejected by the Federal Court of Appeals and also by the Supreme Court of Justice of the Nation.

ESG INTEGRATION

For the ESG scoring, we will use the SPICE’s rating system, suggested by the Principles of Responsible Investment (PRI) organization. For integrating ESG issues with the report, we followed Principles for Responsible Investment’s “A practical guide to ESG integration for equity investment” guide, selecting the Beta approach. This is a fundamental approach, that modifies the Beta used in the valuation, adjusting it to consider the ESG issues. This is meant to integrate opportunities and risks into the model, by analyzing the value the company creates for all the stakeholders involved. These are understood as: suppliers, society, states, people, investors, clients, and the environment. This method has the strength of being a holistic approach to the company’s situation, being strongly fundamental, and fitting this report’s scope in an adequate manner.

We assigned a B- rating on BIOX, which indicates good relative ESG performance and above average degree of transparency in reporting ESG data publicly. Based on this rating, we decided to penalize BIOX with a 5% increase in the Beta for our valuation.

Exhibit 20

SPICE RATING	BETA ADJUSTMENT
A+	-20%
A	-10%
B	0
C	10%
C-	20%

Source: SPICE’s Rating.

Appendix 1

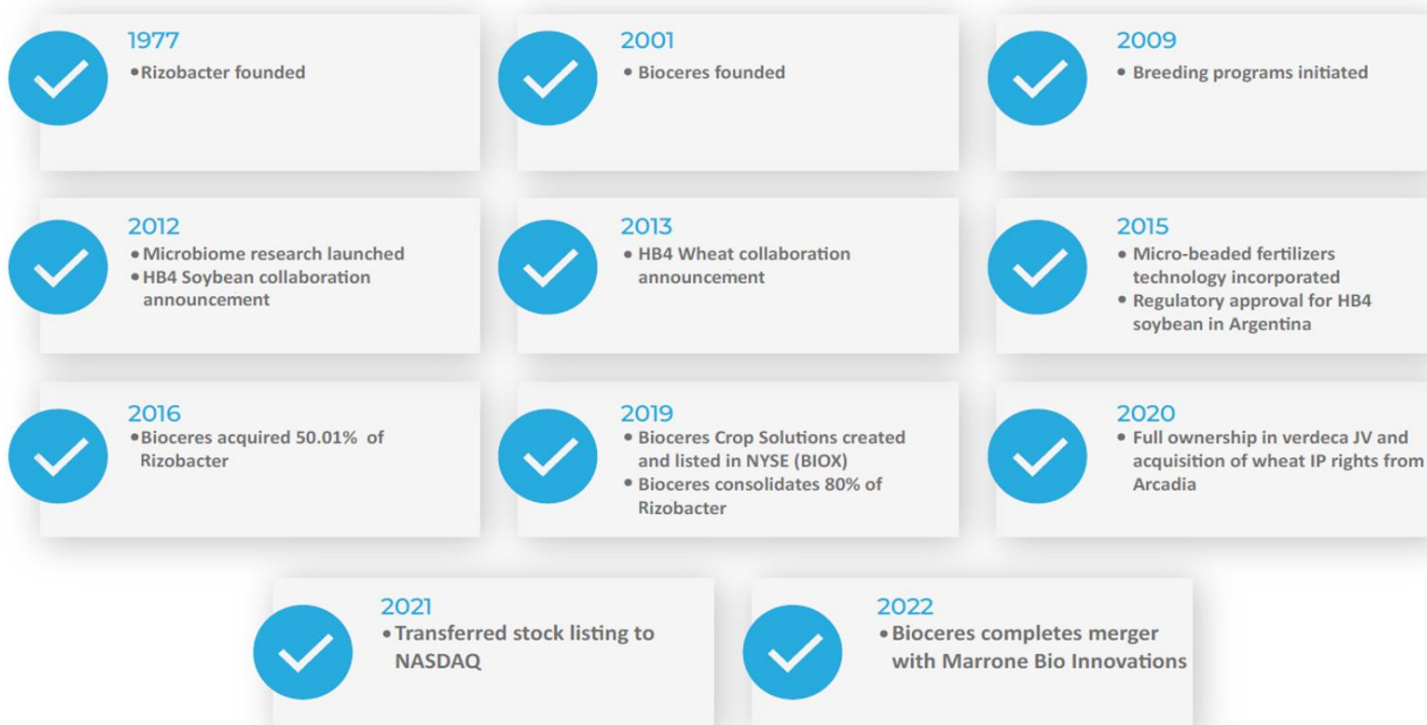
Abbreviations

YoY: Year over year
ARS: Argentinian peso
US\$: United States dollars
TAM: Total addressable market
Bn/B: Billions
T: Trillions
Mn/M: Millions
FY: Fiscal year
Q: Quarter
CAGR: Compound annual growth rate
BIOX: Bioceres Crop Solutions
GM: Genetically modified
FX: Foreign exchange
EBITDA: Earnings before interests, taxes, depreciations and amortization
Capex: Capital expenditures
D&A: Depreciation and amortization
R&D: Research and development

TAM: Total Addressable Market
DCF: Discounted cash flow
ESG: Environmental, social and governance
EV: Enterprise value
FED: US Federal Reserve
WACC: Weighted average cost of capital
GDP: Gross domestic product
FCFF: Free cash flow
PP&E: Property, plants and equipments
US: United States
IMF: International Monetary Fund
OR: Operating risk
IR: Industry risk
RR: Regulatory risk
FR: Financial risk
ER: Environmental risk
SEC: Securities and Exchange Commission
GMO: Genetically modified organism

Appendix 2

History of Bioceres

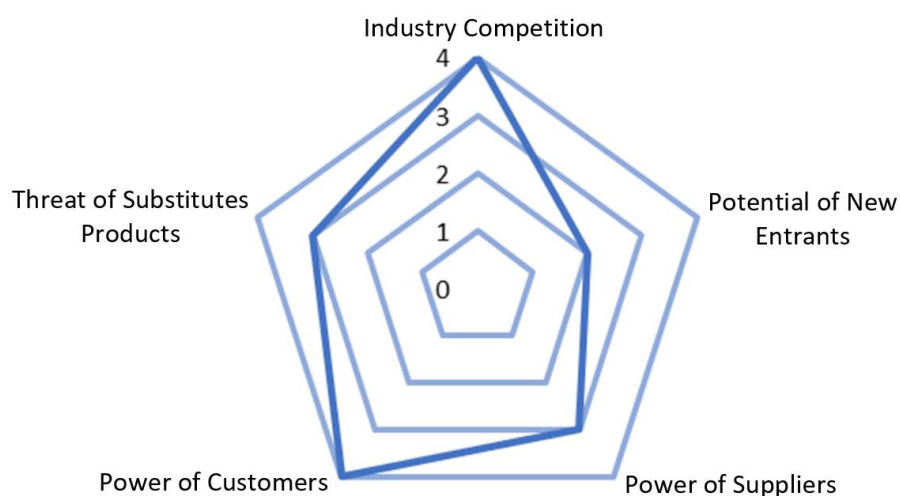


Source: Bioceres Crop Solutions CFA Research Challenge kick-off presentation.

PRO FARM INTEGRATION, COMBINED PORTFOLIO

PRODUCT	BIOCERES	PRO FARM	COMBINED PORTFOLIO
Bio-insecticides		✓	✓
Bio-fungicides	✓	✓	✓
Bio-nematicides		✓	✓
Bio-herbicides		✓	✓
Bio-stimulants	✓	✓	✓
Inoculants	✓		✓
Seeds + Seed traits	✓		✓

Porter's Five Forces



Porter's Five Forces

1. Industry Competition: 4
2. Potential of New Entrants: 2
3. Power of Suppliers: 3
4. Power of Customers: 4
5. Threat of Substitute Products: 3

Legends

0. No threat to the business
1. Insignificant threat to the business
2. Low threat to the Business
3. Moderate threat to the business
4. Significant threat to the business
5. High threat to the business

1. Industry Competition: Significant threat to the business

BIOX business depends to a large extent on the ability to recruit and maintain highly educated staff through direct employment or collaboration agreements. That capacity of recruitment is dependent on the capacity of BIOX to maintain their technology platform with strong and highly updated facilities, as well as the capacity to consistently commercialize their technology with success. In addition to this, BIOX does not enter into non-competing agreements with their employees, which leaves them susceptible to competition attracting their top talents. As a result of this, they might be unable to prevent competition to benefit from the departing employees. Competition in crop productivity products is intense and depends on the constant technological development from the staff, as many companies engage a lot of resources in the development of these products. With this being said, speed in developing and commercializing these new improved products is a key for gaining competitive advantage. So BIOX must keep a lot of resources allocated in R&D and may face problems if competition outperforms BIOX's products.

2. Potential of New Entrants: Low threat to the business

Programs to improve genetics and crop protection chemicals are mostly concentrated within a relatively small number of large companies. This is because the cost to develop these types of products is high and takes a long time. Because of this we believe that there is limited potential for new entrants within this segment. This is not the case for non-genetic products' development, where more competition is expected to enter the business. Non-genetic products are easier to develop, since less expertise is required and is cheaper. That is why we assume a low threat from potential new entrants, since the development of these products is hard, expensive and requires a lot of expertise.

3. Power of Suppliers: Moderate threat to the business

Research and development activities are time consuming, expensive and require a lot of resources. Because of this, Bioceres needs to form joint ventures with different companies, to efficiently take advantage of resources. So, some product development may depend on other companies that BIOX has signed joint ventures with, and this may represent a risk. In addition to this, the commodities market is volatile and may have price increases. This is because of different external factors that affect crop yields. BIOX is highly dependent on this market and a complex moment of shortage in commodities may affect their production. Finally, to produce some of their products, such as seeds, BIOX depends on external producers, that are not in their scope of control. Due to all these reasons, we decided to assign moderate threats to the business in this section.

4. Power of Customers: Significant threat to the business

Due to the nature of the business, Bioceres may be unable to collect royalties and payments from customers that use their technologies, because they depend on the accuracy of the calculation of sales, and the respective calculation of royalties from the customers themselves. Also, the resistance from the customers and the government to genetically modified products can negatively affect the image of the company, and reduce the number of products sold with these technologies, such as the HB4 products. The commercial success of BIOX may be affected by public statements from influential people and entities, where they affirm that genetically modified products are risky for consumption and are ethically questionable.

5. Threat of Substitute Products: Moderate threat to the business

Competition in the crop productivity industry is very strong and there are always competitors who have more budget for research and development than Bioceres, and who can profit by offering better products. Today, we do not see a direct threat, but the risk is latent, due to continuous innovation and the possibility that direct competitors have access to, or relationship with former collaborators that allows them to improve and replicate a better product.

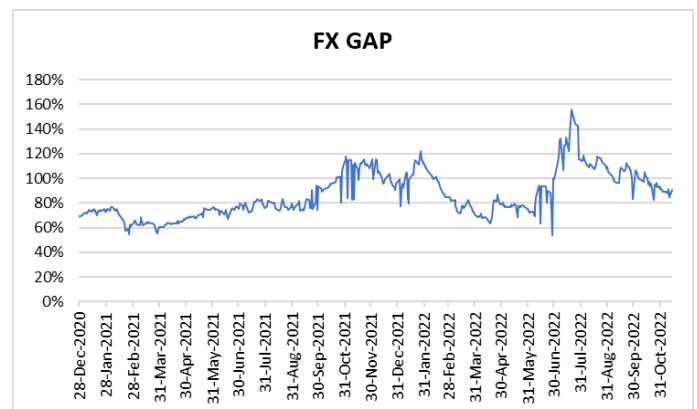
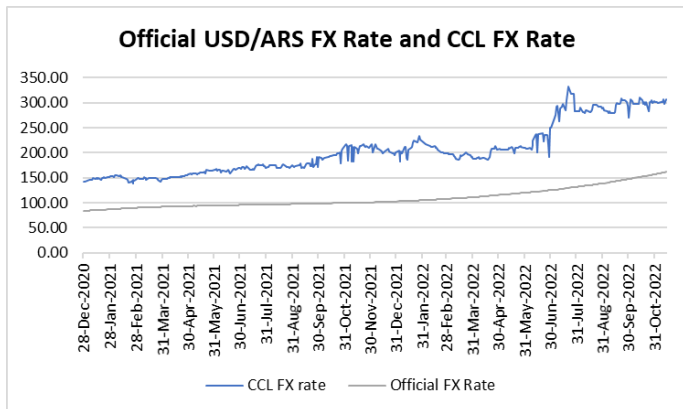
Appendix 5 SWOT

Strengths	Weaknesses
<ul style="list-style-type: none"> - Revenue growth YoY: Revenue has consistently grown throughout the last couple of fiscal years, with a revenue growth from FY21 to FY22 of 59.86%. - Sustainable business model: Bioceres is focusing on producing and delivering products with high technology to transition to a carbon neutral activity, which is good for the company image. - Market size and BIOX Market share in expansion: Market size for BIOX business segments are expected to grow 35% by the year 2027, the average Revenue CAGR of BIOX for the future years is 17%, so we expect that by 2027 market share will be doubled. - HB4 technology for wheat is being approved by countries regulatory entities of the most important markets. 	<ul style="list-style-type: none"> - BIOX may experience difficulties collecting payments and royalties through Rizobacter and Bioceres Semillas, which are their comercial channels. This is because they rely in the good faith of the licensees to report sales and calculate royalties with accuracy. - There are no non-compete agreements with employees. Which may lead to competitors to benefit from former employees. - Working Capital, conversion cycle for FY22 was 125 days, which may result in liquidity issues in the future if it remains within these numbers.
Opportunities	Threats
<ul style="list-style-type: none"> - ProFarm merger with BIOX will open the commercial scope to increase revenues, mainly in United states. - According to ISAAA, biotech crops were planted in only 29 countries as of 2019, presenting a significant long-term growth opportunity in the sector as demand continues to rise. An additional 42 countries imported biotech crops for food, feed, and processing. Thus, a total of 72 countries have adopted biotech crops. 	<ul style="list-style-type: none"> - Competition may use BIOX technologies in jurisdictions where BIOX doesn't have intellectual property protection. - New, more efficient technologies designed by the competence may negatively affect BIOX portfolio of products. - Crop productivity business is a seasonal business, and may depend on external factors that are beyond BIOX scope.

Source: Team work from 20F information.

Appendix 6

FX Gap

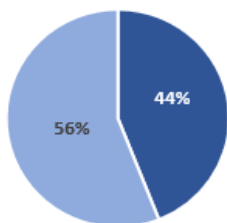


Source: Eikon Refinitiv.

Appendix 7

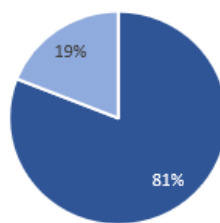
Bioceres Financial Debt

Debt by term



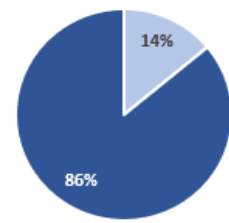
■ Short Term ■ Long Term

Debt by Currency



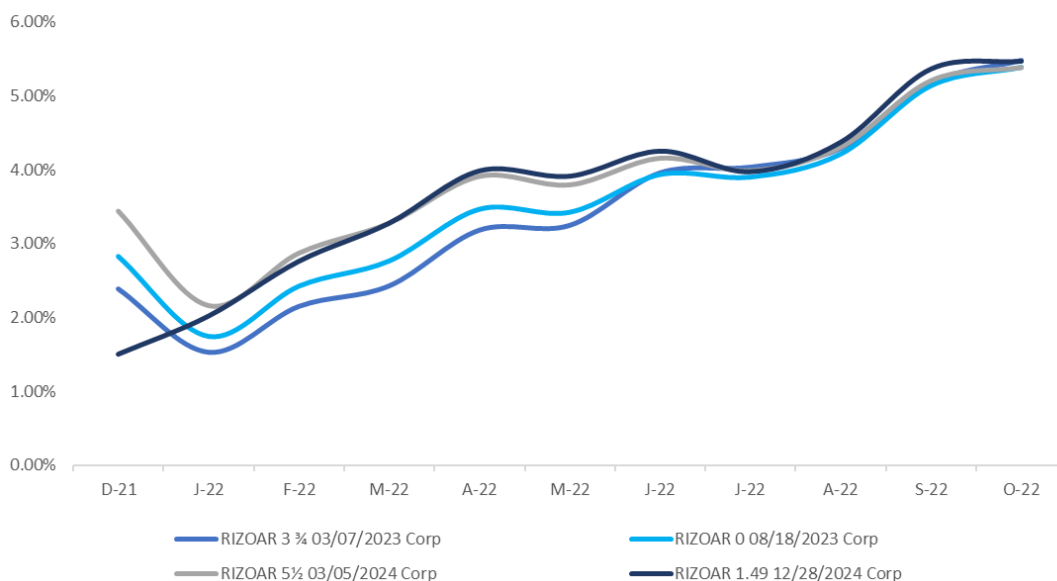
■ USD ■ Foreign

Debt by Type



■ Secured ■ Unsecured

BIOX - Bond Yields



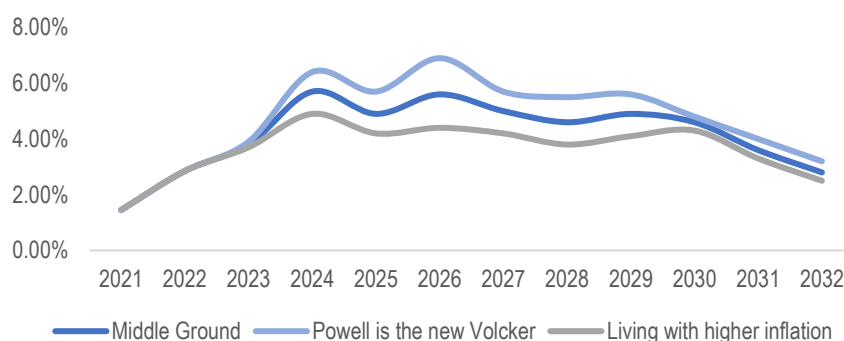
Source: Eikon Refinitiv.

Appendix 8

Risk-Free Rate Scenarios

Powell is the new Volcker: Inflation to 2%	Middle ground	Living with higher inflation
Hawkish approach. Strict inflation controls, interest rates raising in line with USA core inflation measures. Interest rates are not coming back to short-term historical scenarios since 2009's QE and, after inflation boosted in the last year, we do not expect strong quantitative easing policies in the next 10 years.	In order to deliver a more conservative approach, we consider this scenario as a middle ground between a hawkish and dovish interest rate policy, as the two other scenarios that we proposed.	In this scenario, we can see a less aggressive interest rate policy, accepting to coexist with a 3-4% inflation. Even in this situation, we don't observe possibilities of a risk free rate below 2.5%.

US Treasury Bond 10y yield



Sources: Eikon Refinitiv and Team estimates.

Appendix 9

Base case | DCF Valuation

USD MM	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
EBIT	56,1	85,7	93,8	142,4	160,2	186,3	247,6	312,4	338,4	369,9
Tax Rate	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
EBIT * (1-t)	38,0	58,2	63,9	97,0	109,1	126,9	168,6	212,7	230,4	251,9
D&A	15,5	19,0	22,9	26,8	31,3	36,5	42,8	48,3	52,5	55,7
Capex	-20,6	-26,0	-31,5	-37,0	-43,5	-50,8	-59,7	-67,5	-75,0	-79,4
Working Capital	-18,9	-30,9	-37,3	-31,3	-47,4	-54,4	-67,1	-56,5	-39,5	-26,8
FCFF	14,0	20,3	18,0	55,4	49,5	58,1	84,5	137,0	168,4	201,4
FX Gap	1,80	1,70	1,40	1,50	1,60	1,40	1,10	1,20	1,10	1,00
FCFF (after FX Gap)	9,8	14,6	14,5	43,5	37,5	47,4	79,6	122,3	158,5	201,4
Discount Factor	98,5%	80,0%	72,3%	65,5%	58,7%	57,3%	50,6%	49,0%	46,6%	49,8%
Discounted FCFF	10	12	10	28	22	27	40	60	74	100
Terminal Value	1.782									
Multi year WACC	10,9%	11,8%	11,4%	11,2%	11,2%	9,7%	10,2%	9,3%	8,8%	7,2%
G	1,5%									
Total Present Value	2.166									
Net to shareholders	2.039									
Number of shares	63									
Price Target	32,5									

Sources: Company filings and Team estimates.

Appendix 10

Bullish case | DCF Valuation

	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
EBIT	35,4	226,9	124,7	214,7	242,8	317,5	392,1	459,6	515,6	637,0
Tax Rate	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
EBIT * (1-t)	24,0	154,2	84,9	146,2	165,4	216,2	267,0	312,9	351,1	433,8
D&A	16,0	20,1	24,8	29,6	35,5	42,5	51,1	59,3	66,1	72,0
Capex	-21,3	-31,1	-38,6	-46,5	-56,1	-67,4	-81,5	-94,8	-107,5	-117,0
Working Capital	-24,8	-46,7	-39,3	-46,5	-62,7	-77,1	-94,9	-88,2	-71,7	-63,2
FCFF	-6,1	96,5	31,7	82,9	82,0	114,1	141,7	189,2	237,9	325,5
FX Gap	1,60	1,50	1,60	1,40	1,20	1,00	1,00	1,00	1,00	1,00
FCFF (after FX Gap)	-4,5	74,7	23,7	67,7	73,2	114,1	141,7	189,2	237,9	325,5
Discount Factor	98,5%	80,3%	72,6%	69,7%	61,1%	62,1%	57,6%	53,9%	55,4%	53,6%
Discounted FCFF	-4	60	17	47	45	71	82	102	132	174
Terminal Value	3.589									
Multi year WACC	10,9%	11,6%	11,3%	9,5%	10,4%	8,3%	8,2%	8,0%	6,8%	6,4%
G	1,5%									
Total Present Value	4.315									
Net to shareholders	4.188									
Number of shares	63									
Price Target	66,7									

Sources: Company filings and Team estimates.

Appendix 11

Bearish case | DCF Valuation

USD MM	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
EBIT	2,8	67,7	-9,9	103,0	-21,0	286,5	174,1	282,4	173,6	160,2
Tax Rate	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,3
EBIT * (1-t)	1,9	46,0	-6,7	70,2	-14,3	195,1	118,6	192,3	118,2	109,1
D&A	15,0	17,6	20,4	23,9	27,9	32,3	36,8	40,6	43,0	44,5
Capex	-19,9	-18,3	-21,2	-24,9	-29,1	-33,7	-38,4	-42,3	-46,5	-48,3
Working Capital	-10,9	-23,2	-17,6	-34,0	-30,0	-65,8	-35,1	-41,0	-9,5	-4,9
FCFF	-13,9	22,1	-25,1	35,2	-45,5	128,0	81,9	149,6	105,1	100,4
FX Gap	2,50	2,00	2,50	1,80	2,00	1,60	1,90	1,80	1,90	1,70
FCFF (after FX Gap)	-8,2	14,6	-15,0	25,1	-30,8	97,1	56,9	106,8	73,1	73,8
Discount Factor	98,2%	70,4%	50,7%	56,7%	48,9%	45,3%	38,6%	44,8%	39,1%	42,8%
Discounted FCFF	-8	10	-8	14	-15	44	22	48	29	32
Terminal Value	436									
Multi year WACC	13,7%	19,2%	25,4%	15,2%	15,4%	14,1%	14,6%	10,5%	11,0%	8,9%
G	1,5%									
Total Present Value	604									
Net to shareholders	477									
Stock	63									
Price Target	7,6									

Sources: Company filings and Team estimates

Appendix 12

WACC Calculation

	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Risk Free Rate	3,78%	5,65%	4,90%	5,60%	4,95%	4,63%	4,85%	4,55%	3,63%	2,83%
Unlevered Beta	19,68%	19,67%	19,65%	19,65%	19,65%	19,65%	19,65%	19,65%	19,65%	19,65%
ESG Adj. Unlevered Beta	20,67%	20,65%	20,63%	20,63%	20,63%	20,63%	20,63%	20,63%	20,63%	20,63%
Country Risk Premium	14,20%	12,71%	13,26%	11,49%	12,77%	10,20%	10,84%	9,55%	10,20%	8,27%
Cost of Equity	18,79%	18,78%	18,74%	17,52%	18,29%	15,46%	16,28%	14,76%	14,67%	12,10%
Cost of Debt										
Interest Rate	5,22%	7,80%	6,76%	7,73%	6,83%	6,39%	6,69%	6,28%	5,01%	3,91%
Tax Rate	32,19%	32,06%	31,93%	31,91%	31,91%	31,91%	31,91%	31,91%	31,91%	31,91%
Cost of Debt	3,54%	5,30%	4,60%	5,26%	4,65%	4,35%	4,56%	4,28%	3,41%	2,66%
Capital Structure										
E/(D+E)	48,24%	48,24%	48,24%	48,24%	48,24%	48,24%	48,24%	48,24%	48,24%	48,24%
D/(D+E)	51,76%	51,76%	51,76%	51,76%	51,76%	51,76%	51,76%	51,76%	51,76%	51,76%
WACC	10,89%	11,80%	11,42%	11,18%	11,23%	9,71%	10,21%	9,33%	8,84%	7,22%

Sources: Company filings, Eikon Refinitiv and Team estimates

Appendix 13

Income tax calculation

	Tax Rate	Main Revenues									
		FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Argentina	35%	68,6%	67,8%	67,0%	64,4%	64,4%	64,4%	64,4%	64,4%	64,4%	64,4%
Islas Cayman	0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Paraguay	10%	1,9%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%
Uruguay	25%	2,2%	2,2%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%
Francia	28%	2,7%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%
Brasil	34%	11,7%	11,6%	11,4%	14,1%	14,1%	14,1%	14,1%	14,1%	14,1%	14,1%
USA	21%	13,0%	14,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%	15,0%
Income Tax rate		32,2%	32,1%	31,9%	31,9%	31,9%	31,9%	31,9%	31,9%	31,9%	31,9%

Sources: Company filings, Eikon Refinitiv and Team estimates.

Appendix 14

Multiples detailed

Ticker	Price (LC)	Price (US\$)	US\$m		EV/Revenue	EV/EBITDA	
			Market cap.	Enterprise value	2023E	2023E	
Bioceres*	NAS: BIOX	-	14,05	882	1.001	2,0x	14,0x
Adama	SHE: 000553	9,41	1,32	3.083	4.809	0,9x	6,4x
BASF	ETR: BAS	50,71	52,82	47.438	60.223	0,7x	6,4x
Bayer	ETR: BAYN	50,19	52,28	51.362	95.721	1,8x	6,7x
Corteva	NYSE: CTVA	64,77	64,77	46.821	49.033	2,7x	14,1x
FMC Corp.	NYSE: FMC	125,55	125,55	15.932	19.132	3,2x	12,5x
Nufarm	ASX: NUF	5,69	3,81	1.454	1.777	0,8x	6,0x
	Mean:			27.682	38.449	1,7x	9,4x
	Median:			31.377	34.083	1,8x	6,7x

Sources: Factset estimates, company filings.

Notes: Shares prices as of Novembre 11, 2022.

*Bioceres multiples calculated with internal revenue and EBITDA estimates.

To do a thorough validation of a company, it's imperative to consider ESG factors. And to truly capture the risks of poor ESG indicators, a way must be found so that the ESG metrics impact the stock's target price. With this in mind, we decided to integrate our ESG analysis into the valuation, using the Beta approach, suggested by the Principles of Responsible Investment (PRI) and the Refinitiv ESG Scores.

The investigation was done in the following ESG pillars and categories used in Eikon:

PILLAR	CATEGORY
Environmental	Resource Use
	Emissions
	Innovation
Social	Workforce
	Human Rights
	Community
	Product Responsibility
Governance	Management
	Shareholders
	CSR Strategy

And once we had the scores and grades, we applied a Beta Adjustment based on the SPICE's Rating:

SPICE RATING	BETA ADJUSTMENT
A+	-20%
A	-10%
B	0
C	10%
C-	20%

To each ESG pillar, we applied the following scoring:

SCORE RANGE	GRADE	DESCRIPTION
0.0<=score<=0.08333	D-	*D* Score indicates poor relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly
0.08333<=score<=0.166666	D	
0.166666<=score<=0.25000	D+	
0.25000<=score<=0.33333	C-	*C* score indicates satisfactory relative ESG performance and moderate degree of transparency in reporting material ESG data publicly
0.33333<=score<=0.416666	C	
0.416666<=score<=0.50000	C+	
0.50000<=score<=0.58333	B-	*B* score indicates good relative ESG performance and above average degree of transparency in reporting material ESG data publicly
0.58333<=score<=0.666666	B	
0.666666<=score<=0.75000	B+	
0.75000<=score<=0.83333	A-	*A* score indicates excellent relative ESG performance and high degree of transparency in reporting material ESG data publicly
0.83333<=score<=0.916666	A	
0.916666<=score<=1	A+	

ESG Laggards
↑
↓
ESG Leaders

For Bioceres, the following scores and grades were applied:

PILLAR	CATEGORY	CATEGORY SCORES*	CATEGORY WEIGHTS	SUM OF CATEGORY WEIGHTS
Environmental	Emissions	0.854	15%	0.396
	Resource use	0.743	15%	
	Innovation	0.557	13%	
Social	Community	0.272	9%	0.114
	Human rights	0.248	5%	
	Product responsibility	0.352	4%	
	Workforce	0.485	13%	
Corporate governance	Shareholders	0.273	5%	0.062
	CSR strategy	0.232	3%	
	Management	0.242	17%	
TOTAL SCORE				0.572
ESG PRELIMINARY SCORE				B-

We then compared the preliminary score of B- obtained, with the ESG Controversies score. Since the latter was higher than our ESG score, no further penalization was applied, so the final grade remained as B-. The grade and score obtained are consistent with a Beta adjustment of +5% in our valuation, penalizing the company due to their moderate degree of transparency in reporting ESG material publicly.

ESG Preliminary Score	B-
ESG Controversies	B+
ESG Final Score	B-
Beta Adjustment	5%

Rava (2020). Financial FX rate for the Argentine peso. Retrieved from <https://www.rava.com/perfil/DOLAR%20CCL>

Rava (2022). JP Morgan EMBI+. Retrieved from <https://www.rava.com/perfil/RIESGO%20PAIS>

PRI (2016). A Practical Guide to ESG Integration for Equity Investing. ESG Scoring System and Guidelines. Retrieved from <https://www.unpri.org/download?ac=10>

Refinitiv (2021). ESG Data in Eikon – Quick Start Guide. Retrieved from https://www.refinitiv.com/content/dam/marketing/en_us/documents/quick-reference-guides/esg-data-in-eikon-march-2021.pdf

Bioceres Crops (2022). Annual and Quarterly Reports. Retrieved from <https://investors.biocerescrops.com/financials/sec-filings/default.aspx>

Bioceres Crops (2022). Corporate Structure. Retrieved from <https://investors.biocerescrops.com/about-us/corporate-structure/default.aspx>

Bioceres Crops (2022). Business Segments. Retrieved from <https://investors.biocerescrops.com/our-business/business-segments/default.aspx>

Bioceres Crops (2022). Governance Documents. Retrieved from <https://investors.biocerescrops.com/governance/governance-documents/default.aspx>

Argentina's Central Bank (2020). Official FX rate for the Argentine peso. Retrieved from http://www.bcra.gob.ar/PublicacionesEstadisticas/Tipos_de_cambios.asp

Argentina's Central Bank (2020). Regulations and Communications. Retrieved from http://www.bcra.gob.ar/SistemasFinancierosYdePagos/Buscador_de_comunicaciones.asp

Fortune Business Insights (2022). Total Addressable Market (TAM). Retrieved from <https://www.fortunebusinessinsights.com/aboutus>

CFA Research Challenge 2022-2023

Grading Results

UCEMA - 1



Target Company



Bioceres
Crop Solutions

GENERAL GRADING

General Grading

Pass to the local final

Radar



Quartile position

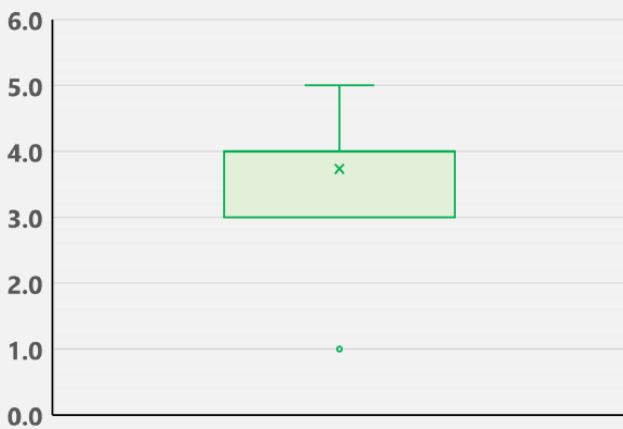
No **4**



TOPIC GRADING

Business Description

Boxplot



Quartile position

No **4**

Graders' comments

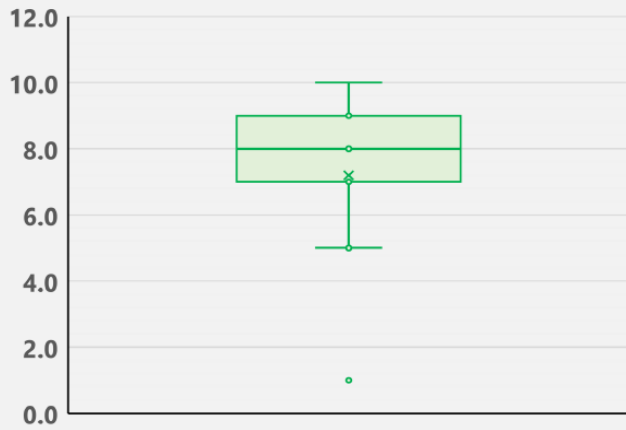
- Very detailed description of the company, its products and services. Outstanding understanding of the company's economics, including key drivers of revenues and expenses.



TOPIC GRADING

Industry Overview & Competitive Positioning

Boxplot



Quartile position

No **3**

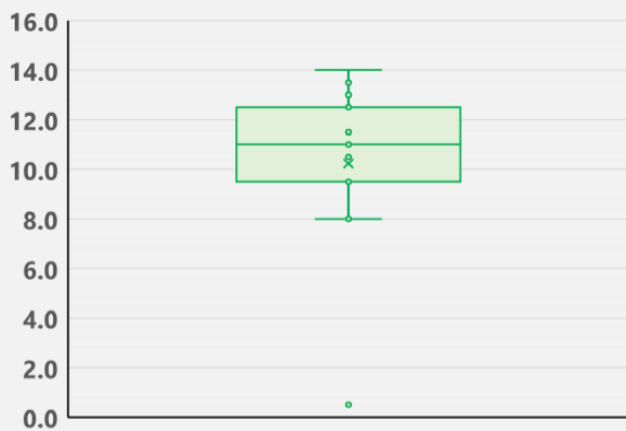
Graders' comments

- Good overview of the industry dynamics and its competitive analysis and definition of the most important drivers of business, the greatest challenges and opportunities. Recommendation: Industry structure (Porter's matrix); company's relative competitive position and strategy might be more development. Include a sensitivity analysis

TOPIC GRADING

Investment Summary

Boxplot



Quartile position

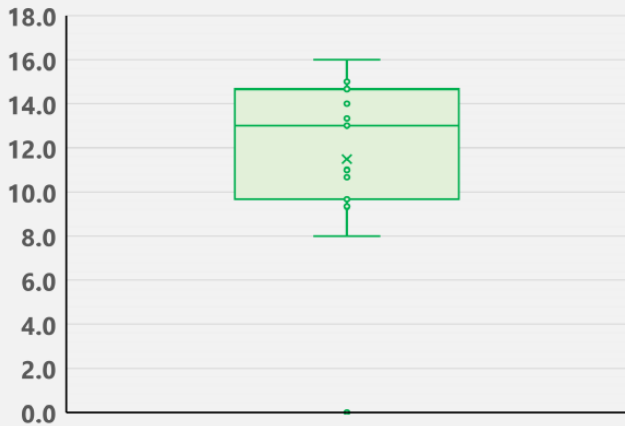
No **4**

Graders' comments

- Very good valuation summary and the recommended investment action. Relationship between valuation, investment risk and summary are developed. Very good description of the company, significant recent developments, and earnings forecast.
- Grammar issues. Good analysis.

Valuation

Boxplot



Quartile position

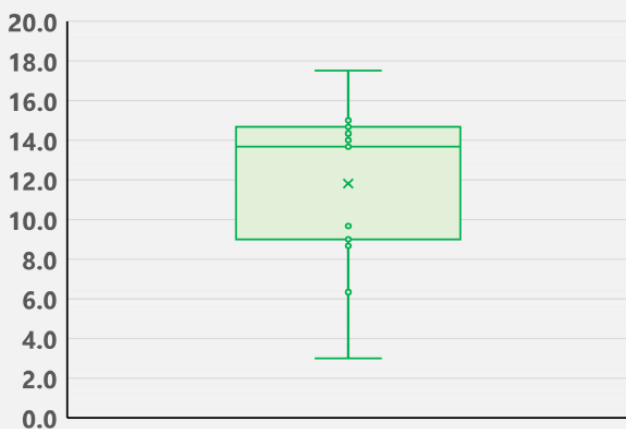
No **3**

Graders' comments

- Too much focus on short term politics (next elections), while a valuation is long term in nature, the past avg of the equity risk premium (ERP), might not be the future ERP (some kind of future ERP is better, including surveys or Damodaran calculations), the terminal growth rate seems too low.
- Why two different current price references for the stock?. Detail explanations of DFC valuation (on revenue growth, profitability assumptions, etc). Hard to find a peer group for comparison purposes for this company. Too much emphasis on multiple valuation approach. Too aggressive WACC calculation (too low for this company).
- Good approach, though more details on the assumptions (specillay in HB4) for each scenario, would have been great.

Financial Analysis

Boxplot



Quartile position

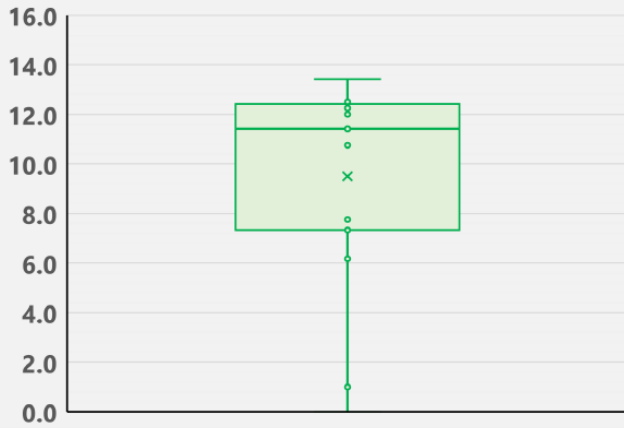
No **4**

Graders' comments

- Excellent commercial and profitability approaches. WC and capex details are also good. Cash Flow analysis should be improved.-
- The overall section looks really good. A few nitpicks --> include commentary on capex expectations beyond next year. Would suggest using bullet points and bolded text to highlight the key takeaways from each section.

Investment Risks

Boxplot



Quartile position

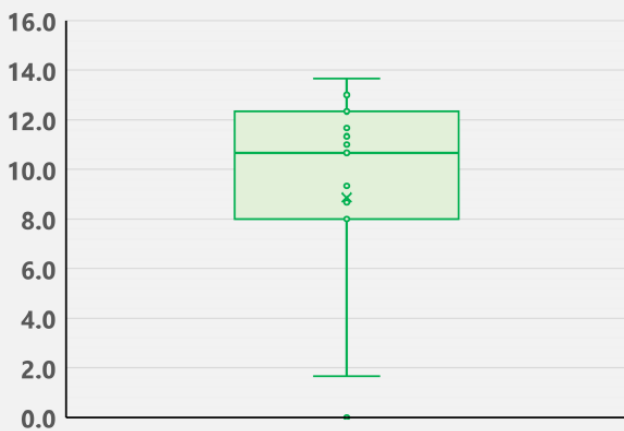
No **4**

Graders' comments

- No probability and impact or risks identified.
- In general, great holistic overall review of the many investment associated risk that could affect the investment thesis on this company.
- All relevant risks are mentioned.

ESG

Boxplot



Quartile position

No **4**

Graders' comments

- Positive approach to each ESG issue by analyzing status of the company towards them.-
- To improve: add comments on incentives to farmers, talk about senior management (only board is mentioned)

Completar cada punto con SI o NO:

- **Repositorio Institucional** (completar con SI o NO):

Si autorizo a la Universidad del CEMA a publicar y difundir en el **Repositorio Institucional** de la Universidad de la Biblioteca con fines exclusivamente académicos y didácticos el Trabajo Final de mi autoría.

- **Catálogo en línea** (completar con SI o NO):

Si autorizo a la Universidad del CEMA a publicar y difundir en el **Catálogo en línea** (acceso con usuario y contraseña) de la Biblioteca con fines exclusivamente académicos y didácticos el Trabajo Final de mi autoría.

- **Página web UCEMA** (completar con SI o NO):

Si autorizo a la Universidad del CEMA a publicar y difundir en la **página web de la Universidad** como Trabajo destacado, si el mismo obtuviese la distinción correspondiente, con fines exclusivamente académicos y didácticos el Trabajo Final de mi autoría.

Firma digital:

A handwritten signature in black ink, appearing to be 'F. Perarnau', written over a horizontal line.

Aclaración: Francisco Perarnau

DNI: 39.756.587

